=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 16:44:19 ON 10 MAR 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Mar 2003 VOL 138 ISS 11 FILE LAST UPDATED: 9 Mar 2003 (20030309/ED)

opiates, amphetamines, cocaine, and/or alc.)

Jan Delaval Reference Librarian Biotechnology & Chemical Library CM1 1E07 – 703-308-4498 jan.delaval@uspto.gov

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 1105 all hitstr tot

```
L105 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS
ΑN
     2002:575739 HCAPLUS
DN
    137:119689
ΤI
    Methods and compositions using a .alpha.3.
    beta.4 nicotinic receptor antagonist combination
    for treating addiction disorders
ΙN
    Glick, Stanley D.; Maisonneuve, Isabelle M.
PΑ
    USA
SO
    U.S. Pat. Appl. Publ., 17 pp.
    CODEN: USXXCO
DT
    Patent
LA
    English
    ICM A61K031-00
TC
    514001000
NCL
     1-11 (Pharmacology)
    Section cross-reference(s): 63
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ____
                                          ______
                                                          _____
    US 2002103109
                    A1
                           20020801
PΙ
                                          US 2002-51770
                                                           20020118
                     A1
    WO 2002060425
                           20020808
                                          WO 2002-US2547
                                                           20020129
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-264742P P
                           20010129
    US 2002-51770
                     Α
                           20020118
    A method for treating an addiction disorder (e.g. an
AΒ
    addiction to or dependency on stimulants,
    nicotine, morphine, heroin, other
```

in a patient is disclosed. The method includes administering to the

```
patient a first .alpha.3.beta.4
    nicotinic receptor antagonist and administering to the patient a second .
    alpha.3.beta.4 nicotinic receptor
    antagonist. The second .alpha.3.beta.
     4 nicotinic receptor antagonist is different than the first .
     alpha.3.beta.4 nicotinic receptor
    antagonist, and the first .alpha.3.beta.
     4 nicotinic receptor antagonist and the second .alpha.
     3.beta.4 nicotinic receptor antagonist are
    administered simultaneously or non-simultaneously.
    Compns. which include a first .alpha.3.
    beta.4 nicotinic receptor antagonist and a second .
    alpha.3.beta.4 nicotinic receptor
    antagonist are also described. Examples of suitable .alpha.
    3.beta.4 nicotinic receptor antagonists for
    use in the methods and compns. include mecamylamine,
    18-methoxycoronaridine, bupropion,
    dextromethorphan, dextrorphan, and pharmaceutically
    acceptable salts and solvates thereof. A method of evaluating a compd.
     for its effectiveness in treating addiction disorders is also
    described.
ST
    alpha3 beta4 nicotinic receptor antagonist
    combination addiction disorder pharmaceutical;
    mecamylamine combination addiction disorder
    pharmaceutical; methoxycoronaridine combination
    addiction disorder pharmaceutical; bupropion
    combination addiction disorder pharmaceutical;
    dextromethorphan combination addiction
    disorder pharmaceutical; dextrorphan combination
    addiction disorder pharmaceutical
ΙT
    5-HT receptors
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (5-HT3; .alpha.3.beta.4
        nicotinic receptor antagonist combination for treating
        addiction disorders)
TΤ
    Glutamate receptors
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (NMDA-binding, NR1/2A and NR1/2B; .alpha.3
        .beta.4 nicotinic receptor antagonist
        combination for treating addiction disorders)
IT
    Drug delivery systems
        (capsules; .alpha.3.beta.4
        nicotinic receptor antagonist combination for treating
        addiction disorders)
IT
    Drug delivery systems
        (elixirs; .alpha.3.beta.4
        nicotinic receptor antagonist combination for treating
        addiction disorders)
ΤТ
    Drug delivery systems
        (powders; .alpha.3.beta.4
        nicotinic receptor antagonist combination for treating
        addiction disorders)
ΙT
    Behavior
        (self-administration; .alpha.3.beta.
        4 nicotinic receptor antagonist combination for
        treating addiction disorders)
IT
    Drug delivery systems
        (suspensions; .alpha.3.beta.4
        nicotinic receptor antagonist combination for treating
        addiction disorders)
ΙT
    Drug delivery systems
        (syrups; .alpha.3.beta.4
        nicotinic receptor antagonist combination for treating
```

```
addiction disorders)
IT
     Drug delivery systems
        (tablets; .alpha.3.beta.4
        nicotinic receptor antagonist combination for treating
        addiction disorders)
ΙT
     Alcoholism
       Drug delivery systems
       Drug dependence
       Drug interactions
       Nicotinic antagonists
        (.alpha.3.beta.4 nicotinic
        receptor antagonist combination for treating
        addiction disorders)
TT
     Opioids
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); BIOL (Biological study)
        (.alpha.3.beta.4 nicotinic
        receptor antagonist combination for treating
        addiction disorders)
ΙT
     Nicotinic receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (.alpha.3.beta.4 nicotinic
        receptor antagonist combination for treating
        addiction disorders)
ΙT
     50-36-2, Cocaine 54-11-5, Nicotine
     300-62-9, Amphetamine 561-27-3, Heroin
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); BIOL (Biological study)
        (.alpha.3.beta.4 nicotinic
        receptor antagonist combination for treating
        addiction disorders)
     57-27-2, Morphine, biological studies 64-31-3,
TT
     Morphine sulfate 537-46-2, Methamphetamine
     28297-73-6, Methamphetamine sulfate
     RL: PAC (Pharmacological activity); BIOL (Biological study)
        (.alpha.3.beta.4 nicotinic
        receptor antagonist combination for treating
        addiction disorders)
ΤТ
     60-40-2, Mecamylamine 125-69-9,
     Dextromethorphan hydrobromide 125-71-3,
     Dextromethorphan 125-73-5, Dextrorphan
     467-77-6, 18-Methoxycoronaridine
     826-39-1, Mecamylamine hydrochloride 34911-55-2
     , Bupropion 266686-75-3 266686-77-5
     444143-81-1 444143-82-2
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (.alpha.3.beta.4 nicotinic
        receptor antagonist combination for treating
        addiction disorders)
ΤΤ
     50-36-2, Cocaine 54-11-5, Nicotine
     300-62-9, Amphetamine 561-27-3, Heroin
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); BIOL (Biological study)
        (.alpha.3.beta.4 nicotinic
        receptor antagonist combination for treating
        addiction disorders)
RN
     50-36-2 HCAPLUS
     8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-,
CN
     methyl ester, (1R, 2R, 3S, 5S) - (9CI) (CA INDEX NAME)
Absolute stereochemistry. Rotation (-).
```

RN 54-11-5 HCAPLUS

CN Pyridine, 3-[(2S)-1-methyl-2-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 300-62-9 HCAPLUS

CN Benzeneethanamine, .alpha.-methyl- (9CI) (CA INDEX NAME)

RN 561-27-3 HCAPLUS

CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl- (5.alpha.,6.alpha.)-, diacetate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 57-27-2, Morphine, biological studies 64-31-3,

Morphine sulfate 537-46-2, Methamphetamine

28297-73-6, Methamphetamine sulfate

RL: PAC (Pharmacological activity); BIOL (Biological study)

(.alpha.3.beta.4 nicotinic

receptor antagonist combination for treating

addiction disorders)

RN 57-27-2 HCAPLUS

CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5.alpha.,6.alpha.)- (9CI) (CA INDEX NAME) Absolute stereochemistry. Rotation (-).

RN 64-31-3 HCAPLUS CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5.alpha.,6.alpha.)-, sulfate (2:1) (salt) (9CI) (CA INDEX NAME)

CRN 7664-93-9 CMF H2 O4 S

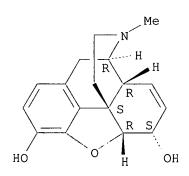
1

CM

CM 2

CRN 57-27-2 CMF C17 H19 N O3

Absolute stereochemistry. Rotation (-).



RN 537-46-2 HCAPLUS

CN Benzeneethanamine, N,.alpha.-dimethyl-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 537-46-2 CMF C10 H15 N

Absolute stereochemistry. Rotation (+).

60-40-2, Mecamylamine 125-69-9, ΙT Dextromethorphan hydrobromide 125-71-3, Dextromethorphan 125-73-5, Dextrorphan 467-77-6, 18-Methoxycoronaridine 826-39-1, Mecamylamine hydrochloride 34911-55-2 , Bupropion 266686-75-3 266686-77-5 444143-81-1 444143-82-2 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (.alpha.3.beta.4 nicotinic receptor antagonist combination for treating addiction disorders) RN 60-40-2 HCAPLUS CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl- (9CI) (CA INDEX NAME)

RN 125-69-9 HCAPLUS

CN Morphinan, 3-methoxy-17-methyl-, hydrobromide, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### ● HBr

RN 125-71-3 HCAPLUS CN Morphinan, 3-methoxy-17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 125-73-5 HCAPLUS CN Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 467-77-6 HCAPLUS CN Ibogamine-18-carboxylic acid, methyl ester (9CI) (CA INDEX NAME) Absolute stereochemistry.

RN 826-39-1 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)

HCl

RN 34911-55-2 HCAPLUS

CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]- (9CI) (CA INDEX NAME)

RN 266686-75-3 HCAPLUS

CN Ibogamine-18-carboxylic acid, 21-methoxy-, methyl ester, monohydrochloride, (2.alpha.,4.alpha.,5.beta.,6.alpha.,18.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

● HCl

RN 266686-77-5 HCAPLUS

CN Ibogamine-18-carboxylic acid, 21-methoxy-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

● HCl

RN 444143-81-1 HCAPLUS

CN Morphinan, 3-methoxy-17-methyl-, (9.alpha.,13.alpha.,14.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 125-71-3 CMF C18 H25 N O

CM 2

CRN 60-40-2 CMF C11 H21 N

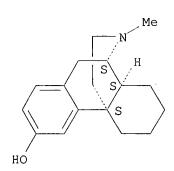
RN 444143-82-2 HCAPLUS

CN Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 125-73-5 CMF C17 H23 N O

Absolute stereochemistry.



CM 2

CRN 60-40-2 CMF C11 H21 N

```
NHMe
Me
Me
```

```
L105 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS
AN
     2002:211766 HCAPLUS
DN
     137:134941
ΤI
     Antagonism of .alpha.3.beta.4
     nicotinic receptors as a strategy to reduce opioid and stimulant
     self-administration
ΑU
     Glick, Stanley D.; Maisonneuve, Isabelle M.; Kitchen, Barbara A.; Fleck,
     Mark W.
CS
     Albany Medical College (MC-136), Center for Neuropharmacology and
     Neuroscience, Albany, NY, 12208, USA
SO
     European Journal of Pharmacology (2002), 438(1-2), 99-105
     CODEN: EJPHAZ; ISSN: 0014-2999
PΒ
     Elsevier Science B.V.
DT
     Journal
LA
     English
CC
     1-11 (Pharmacology)
AB
     The iboga alkaloid ibogaine and the novel iboga alkaloid
     congener 18-methoxycoronaridine are putative anti-
     addictive agents. Using patch-clamp methodol., the actions of
     ibogaine and 18-methoxycoronaridine at various
     neurotransmitter receptor ion-channel subtypes were detd. Both
     ibogaine and 18-methoxycoronaridine were
     antagonists at .alpha.3.beta.4
     nicotinic receptors and both agents were more potent at this site than at
     .alpha.4.beta.2 nicotinic receptors or at NMDA or 5-HT3 receptors;
     18-methoxycoronaridine was more selective in this regard
     than ibogaine. In studies of morphine and
     methamphetamine self-administration, the effects of low dose
     combinations of 18-methoxycoronaridine with
     mecamylamine or dextromethorphan and of
     mecamylamine with dextromethorphan were assessed.
     Mecamylamine and dextromethorphan have also been shown
     to be antagonists at .alpha.3.beta.4
     nicotinic receptors. All three drug combinations
     decreased both morphine and methamphetamine
     self-administration at doses that were ineffective if administered alone.
     The data are consistent with the hypothesis that antagonism at .
     alpha.3.beta.4 receptors is a
     potential mechanism to modulate drug seeking behavior.
     18-Methoxycoronaridine apparently has greater
     selectivity for this site than other agents and may be the first of a new
     class of synthetic agents acting via this novel mechanism to produce a
     broad spectrum of anti-addictive activity.
ST
     nicotinic receptor antagonism opioid self administration drug
     abuse
ΙT
     5-HT receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (5-HT3; antagonism of .alpha.3.beta.
        4 nicotinic receptors as a strategy to reduce opioid
        and stimulant self-administration)
ΙT
     Glutamate receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (NMDA-binding; antagonism of .alpha.3.beta.
```

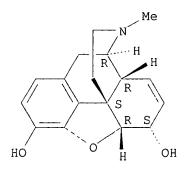
4 nicotinic receptors as a strategy to reduce opioid and stimulant self-administration) ΙT Drug dependence Drugs of abuse (antagonism of .alpha.3.beta.4 nicotinic receptors as a strategy to reduce opioid and stimulant self-administration) ΙT Nicotinic receptors RL: BSU (Biological study, unclassified); BIOL (Biological study) (antagonism of .alpha.3.beta.4 nicotinic receptors as a strategy to reduce opioid and stimulant self-administration) IT Behavior (self-administration; antagonism of .alpha.3 .beta.4 nicotinic receptors as a strategy to reduce opioid and stimulant self-administration) ΙT 57-27-2, Morphine, biological studies 537-46-2 , Methamphetamine RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (antagonism of .alpha.3.beta.4 nicotinic receptors as a strategy to reduce opioid and stimulant self-administration) IT 60-40-2, Mecamylamine 83-74-9, Ibogaine 125-71-3, Dextromethorphan 467-77-6, 18-Methoxycoronaridine RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antagonism of .alpha.3.beta.4 nicotinic receptors as a strategy to reduce opioid and stimulant self-administration) RE.CNT THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD RE (1) Badio, B; Mol Pharmacol 1997, V51, P1 HCAPLUS (2) Chen, K; Neuropharmacology 1996, V35, P423 HCAPLUS (3) Ebert, B; Biochem Pharmacol 1998, V56, P553 HCAPLUS (4) Flores, C; Mol Pharmacol 1992, V41, P31 HCAPLUS (5) Fryer, J; J Pharmacol Exp Ther 1999, V288, P88 HCAPLUS (6) Glick, S; Ann N Y Acad Sci 1998, V844, P214 HCAPLUS (7) Glick, S; Ann N Y Acad Sci 2000, V914, P369 HCAPLUS (8) Glick, S; Ann N Y Acad Sci 2000, V909, P88 HCAPLUS (9) Glick, S; Brain Res 1996, V719, P29 HCAPLUS (10) Glick, S; Eur J Pharmacol 1991, V195, P341 HCAPLUS (11) Glick, S; Eur J Pharmacol 2001, V422, P87 HCAPLUS (12) Glick, S; NeuroReport 2000, V11, P2013 HCAPLUS (13) Hernandez, S; J Pharmacol Exp Ther 2000, V293, P962 HCAPLUS (14) Jun, J; Pharmacol Biochem Behav 2000, V67, P405 HCAPLUS (15) Klink, R; J Neurosci 2001, V21, P1452 HCAPLUS (16) Koyuncuoglu, H; Int J Clin Pharmacol Ther 1990, V28, P147 MEDLINE (17) Koyuncuoglu, H; Int J Clin Pharmacol Ther 1995, V33, P13 MEDLINE (18) Levin, E; Soc Neurosci Abstr 2000, V26, P1821 (19) Mah, S; Brain Res 1998, V797, P173 HCAPLUS (20) Maisonneuve, I; Eur J Pharmacol 1999, V383, P15 HCAPLUS (21) Murray, T; Life Sci 1984, V34, P1899 HCAPLUS (22) Nishikawa, T; Brain Res 1986, V373, P324 HCAPLUS (23) Papke, R; J Pharmacol Exp Ther 2001, V297, P646 HCAPLUS (24) Popik, P; J Pharmacol Exp Ther 1995, V275, P753 HCAPLUS (25) Pulvirenti, L; Eur J Pharmacol 1997, V321, P279 HCAPLUS (26) Quick, M; Neuropharmacology 1999, V38, P769 HCAPLUS (27) Reid, M; Neuropsychopharmacology 1999, V20, P297 HCAPLUS (28) Rezvani, A; Pharmacol Biochem Behav 1997, V58, P615 HCAPLUS (29) Sweetnam, P; Psychopharmacology 1995, V118, P369 HCAPLUS (30) Weeks, J; Methods in Psychobiology 1972, V2, P155 57-27-2, Morphine, biological studies 537-46-2

#### , Methamphetamine

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (antagonism of .alpha.3.beta.4 nicotinic receptors as a strategy to reduce opioid and stimulant self-administration)
57-27-2 HCAPLUS
Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-

Absolute stereochemistry. Rotation (-).

(5.alpha., 6.alpha.) - (9CI) (CA INDEX NAME)



RN

CN

RN 537-46-2 HCAPLUS

CN Benzeneethanamine, N,.alpha.-dimethyl-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 60-40-2, Mecamylamine 83-74-9,

Ibogaine 125-71-3, Dextromethorphan

467-77-6, 18-Methoxycoronaridine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antagonism of .alpha.3.beta.4
 nicotinic receptors as a strategy to reduce opioid and stimulant self-administration)

RN 60-40-2 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N, 2, 3, 3-tetramethyl- (9CI) (CA INDEX NAME)

RN 83-74-9 HCAPLUS

CN Ibogamine, 12-methoxy- (9CI) (CA INDEX NAME)

RN 125-71-3 HCAPLUS

CN Morphinan, 3-methoxy-17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 467-77-6 HCAPLUS

CN Ibogamine-18-carboxylic acid, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L105 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS

AN **2001:545488** HCAPLUS

DN 135:117246

TI Methods using a .mu. opioid antagonist, calcium channel blocker, and NMDA glutamate receptor modulator for the treatment of substance abuse

IN Shulman, Albert

PA Australia

SO PCT Int. Appl., 48 pp. CODEN: PIXXD2

DT Patent

```
LA
     English
IC
     ICM A61K031-485
          A61K031-16; A61K031-277; A61K031-4422; A61K031-4418; A61K031-554;
          A61K031-4965; A61P025-30; A61P025-32; A61P025-34; A61P025-36
CC
     1-11 (Pharmacology)
     Section cross-reference(s): 4
FAN.CNT 1
     PATENT NO.
                       KIND
                              DATE
                                              APPLICATION NO.
                                                                DATE
                       ____
                              -----
                                              _____
                                                                20010122
     WO 2001052851
                        Α1
                              20010726
                                             WO 2001-AU60
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
                                                                          CH, CN,
              CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
              HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
              BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                              20010731
                                             AU 2001-26574
     AU 2001026574
                        Α5
                                                                20010122
                              20021023
                                              EP 2001-901062
     EP 1250136
                        Α1
                                                                20010122
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                              20020919
     NO 2002003482
                        Α
                                              NO 2002-3482
                                                                20020722
PRAI GB 2000-1390
                        Α
                              20000122
     GB 2000-1647
                        Α
                              20000126
     AU 2000-2237
                        Α
                              20001221
     AU 2000-22370
                        Α
                              20001221
                        W
     WO 2001-AU60
                              20010122
AΒ
     Methods are provided for therapy for substance (e.g. alc
     .) addiction which comprise the administration of a
     combination of (i) a .mu.-opioid receptor antagonist;
     (ii) a calcium channel blocker which is long-acting or in
     sustained-release form or which is nimodipine in rapid release form; and
     (iii) an NMDA glutamate receptor modulator. Also provided are
     combinations, kits and compns. useful therefor.
     substance abuse treatment mu opioid
     antagonist combination; nimodipine calcium channel blocker
     substance abuse treatment; NMDA glutamate receptor
     modulator substance abuse treatment; alc
     addiction combination treatment
ΙT
     Glutamate receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (NMDA-binding; .mu. opioid antagonist, calcium channel
        blocker, and NMDA glutamate receptor modulator for treatment of
        substance abuse)
ΙT
     Drugs of abuse
         (abuse of; .mu. opioid antagonist, calcium channel
        blocker, and NMDA glutamate receptor modulator for treatment of
        substance abuse)
IT
     Ion channel blockers
        (calcium; .mu. opioid antagonist, calcium channel blocker,
        and NMDA glutamate receptor modulator for treatment of substance
        abuse)
ΙT
     Drug delivery systems
         (oral; .mu. opioid antagonist, calcium channel blocker, and
        NMDA glutamate receptor modulator for treatment of substance
        abuse)
ΙT
     Paints
         (paint solvent inhalants; .mu. opioid antagonist, calcium
        channel blocker, and NMDA glutamate receptor modulator for treatment of
        substance abuse)
```

```
ΙT
    Volatile substances
        (solvents, inhalant; .mu. opioid antagonist, calcium channel
       blocker, and NMDA glutamate receptor modulator for treatment of
        substance abuse)
IT
     Drug delivery systems
        (sustained-release; .mu. opioid antagonist, calcium channel
       blocker, and NMDA glutamate receptor modulator for treatment of
        substance abuse)
ΙT
     Solvents
        (volatile, inhalant; .mu. opioid antagonist, calcium channel
       blocker, and NMDA glutamate receptor modulator for treatment of
        substance abuse)
IT
    Opioids
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (.kappa.-; .mu. opioid antagonist, calcium channel blocker,
       and NMDA glutamate receptor modulator for treatment of substance
       abuse)
    Alcoholism
ТТ
    Cannabis
    Drug delivery systems
      Drug dependence
    Drug interactions
      Nicotinic antagonists
        (.mu. opioid antagonist, calcium channel blocker, and NMDA
       glutamate receptor modulator for treatment of substance
       abuse)
    Opioids
TT
    RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (.mu. opioid antagonist, calcium channel blocker, and NMDA
       glutamate receptor modulator for treatment of substance abuse
ΙT
    Opioid antagonists
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
        (.mu.-opioid; .mu. opioid antagonist, calcium
       channel blocker, and NMDA glutamate receptor modulator for treatment of
       substance abuse)
TT
    54-11-5, Nicotine 64-17-5, Ethanol,
    biological studies
    RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (.mu. opioid antagonist, calcium channel blocker, and NMDA
        glutamate receptor modulator for treatment of substance abuse
IT
    52-53-9, Verapamil 60-40-2, Mecamylamine
                       1003-51-6, HA966
                                            1477-40-3
    83-74-9, <u>Ibogaine</u>
                              19982-08-2, Memantine
    16590-41-3, Naltrexone
                                                      21829-25-4, Nifedipine
                              23210-56-2, Ifenprodil 34911-55-2,
    22609-73-0, Niludipine
                 39562-70-4, Nitrendipine
                                            42399-41-7, Diltiazem
    Bupropion
     52468-60-7, Flunarizine
                               52485-79-7, Buprenorphine
                                                           55096-26-9,
                55985-32-5, Nicardipine 63675-72-9, Nisoldipine
    Nalmefene
     66085-59-4, Nimodipine
                              68506-86-5, .gamma.-vinyl-GABA
                                                               71653-63-9,
                72509-76-3, Felodipine
                                          72803-02-2, Darodipine
                                                                   75530-68-6,
    Riodipine
                   75695-93-1, Isradipine
    Nilvadipine
                                            77086-21-6, Dizocilpine
     77337-76-9, Acamprosate
                               77590-96-6, Flordipine
                                                        88150-42-9, Amlodipine
     90729-41-2, Oxodipine
                             94739-29-4, Lemildipine
                                                       100828-16-8,
     3-(2-Carboxypiperazin-4-yl)propyl-1-phosphonic acid
                                                          103890-78-4,
    Lacidipine
                113165-32-5, Niguldipine
                                             119413-55-7, Elgodipine
     119431-25-3, Eliprodil
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
```

```
(Uses)
        (.mu. opioid antagonist, calcium channel blocker, and NMDA
        glutamate receptor modulator for treatment of substance abuse
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Calcagnetti, D; Life Sciences 1995, V56(7), P475 HCAPLUS
(2) Lipha; EP 945133 A 1999 HCAPLUS
(3) Merck Sharp & Dohme Limited; WO 99/44610 A 1999 HCAPLUS
(4) Novoneuron, Inc; WO 99/11250 A 1999 HCAPLUS
(5) Terenius, L; Current Opinion in Chemical Biology 1998, V2(4), P541 HCAPLUS IT 54-11-5, Nicotine 64-17-5, Ethanol,
     biological studies
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (.mu. opioid antagonist, calcium channel blocker, and NMDA
        glutamate receptor modulator for treatment of substance abuse
     54-11-5 HCAPLUS
RN
CN
     Pyridine, 3-[(2S)-1-methyl-2-pyrrolidinyl]- (9CI) (CA INDEX NAME)
Absolute stereochemistry. Rotation (-).
  Me
     64-17-5 HCAPLUS
RN
CN
     Ethanol (9CI)
                   (CA INDEX NAME)
H3C-CH2-OH
IT
     60-40-2, Mecamylamine 83-74-9,
     Ibogaine 34911-55-2, Bupropion
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (.mu. opioid antagonist, calcium channel blocker, and NMDA
        glutamate receptor modulator for treatment of substance abuse
RN
     60-40-2 HCAPLUS
CN
     Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl- (9CI) (CA INDEX NAME)
     NHMe
       Me
      Me
     Me
     83-74-9 HCAPLUS
RN
CN
     Ibogamine, 12-methoxy- (9CI) (CA INDEX NAME)
```

RN 34911-55-2 HCAPLUS

CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]- (9CI) (CA INDEX NAME)

L105 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS

AN 2000:373737 HCAPLUS

DN 133:99376

TI Dextromethorphan and its metabolite dextrorphan block .alpha.3.beta.4 neuronal nicotinic receptors

AU Hernandez, Susan C.; Bertolino, Maria; Xiao, Yingxian; Pringle, Kenneth E.; Caruso, Frank S.; Kellar, Kenneth J.

CS Department of Pharmacology, Georgetown University School of Medicine, Washington, DC, USA

SO Journal of Pharmacology and Experimental Therapeutics (2000), 293(3), 962-967
CODEN: JPETAB; ISSN: 0022-3565

PB American Society for Pharmacology and Experimental Therapeutics

DT Journal

LA English

CC 1-9 (Pharmacology)
 Section cross-reference(s): 13

AΒ Dextromethorphan (DM), a structural analog of morphine and codeine, has been widely used as a cough suppressant for more than 40 yr. DM is not itself a potent analgesic, but it has been reported to enhance analgesia produced by morphine and nonsteroidal anti-inflammatory drugs. Although DM is considered to be nonaddictive, it has been reported to reduce morphine tolerance in rats and to be useful in helping addicted subjects to withdraw from heroin. Here we studied the effects of DM on neuronal nicotinic receptors stably expressed in human embryonic kidney cells. Studies were carried out to examine the effects of DM on nicotine-stimulated whole cell currents and nicotine -stimulated 86Rb+ efflux. We found that both DM and its metabolite dextrorphan block nicotinic receptor function in a noncompetitive but reversible manner, suggesting that both drugs block the receptor channel. Consistent with blockade of the receptor channel, neither drug competed for the nicotinic agonist binding sites

ST

IT

ΙΤ

ΙT

IT

ΙΤ

TT

RE

labeled by [3H]epibatidine. Although DM is approx. 9-fold less potent than the widely used noncompetitive nicotinic antagonist mecamylamine in blocking nicotinic receptor function, the block by DM appears to reverse more slowly than that by mecamylamine. These data indicate that DM is a useful antagonist for studying nicotinic receptor function and suggest that it might prove to be a clin. useful neuronal nicotinic receptor antagonist, possibly helpful as an aid for helping people addicted to nicotine to refrain from smoking, as well as in other conditions where blockade of neuronal nicotinic receptors would be helpful. dextromethorphan dextrorphan neuronal nicotinic receptor nicotine addiction Tobacco smoke (dextromethorphan and metabolite dextrorphan block .alpha.3.beta.4 neuronal nicotinic receptors) Nicotinic receptors RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (dextromethorphan and metabolite dextrorphan block .alpha.3.beta.4 neuronal nicotinic receptors) Nerve (neuron; dextromethorphan and metabolite dextrorphan block .alpha.3.beta.4 neuronal nicotinic receptors) Drug dependence (to nicotine; dextromethorphan and metabolite dextrorphan block .alpha.3.beta. 4 neuronal nicotinic receptors) 54-11-5, Nicotine RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (addiction; dextromethorphan and metabolite dextrorphan block .alpha.3.beta. 4 neuronal nicotinic receptors) 125-71-3, Dextromethorphan 125-73-5, Dextrorphan RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (dextromethorphan and metabolite dextrorphan block .alpha.3.beta.4 neuronal nicotinic receptors) RE.CNT THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD 24 (1) Amador, M; Synapse 1991, V7, P207 MEDLINE (2) Bem, J; Drug Saf 1992, V7, P190 MEDLINE (3) Briggs, C; Neuropharmacology 1996, V35, P407 HCAPLUS (4) Capon, D; Clin Pharmacol Ther 1996, V60, P295 HCAPLUS (5) Choi, D; Brain Res 1987, V403, P333 HCAPLUS (6) Choi, D; J Pharmacol Exp Ther 1987, V242, P713 HCAPLUS (7) Church, J; Eur J Pharmacol 1985, V111, P185 HCAPLUS (8) Elliott, K; Pain 1994, V59, P361 HCAPLUS (9) Halliwell, R; Br J Pharmacol 1989, V96, P480 HCAPLUS (10) Hernandez, S; Soc Neurosci Abstr 1998, V24, P86 (11) Koyuncuoglu, H; Int J Clin Pharmacol Ther Toxicol 1990, V28, P147 MEDLINE (12) Lukas, R; Anal Biochem 1988, V175, P212 HCAPLUS (13) Mao, J; Pain 1996, V67, P361 HCAPLUS (14) Maus, A; Mol Pharmacol 1998, V54, P779 HCAPLUS (15) Price, D; Pain 1996, V68, P119 HCAPLUS (16) Ramoa, A; J Pharmacol Exp Ther 1990, V254, P71 HCAPLUS

(17) Reisine, T; Goodman and Gilman's The Pharmacological Basis of Therapeutics

1996, P521 (18) Rose, J; Clin Pharmacol Ther 1994, V56, P86 HCAPLUS (19) Rose, J; Exp Clin Psychopharmacol 1998, V6, P331 HCAPLUS

(20) Shoaib, M; Br J Pharmacol 1994, V111, P1073 HCAPLUS

(21) Shoaib, M; J Pharmacol 1992, V105, P514 HCAPLUS (22) Xiao, Y; Mol Pharmacol 1998, V54, P322 HCAPLUS

(23) Yamamoto, H; Neurosci Lett 1992, V147, P97 HCAPLUS

(24) Zia, S; Res Commun Mol Pathol Pharmacol 1997, V97, P243 HCAPLUS

IT. 54-11-5, Nicotine

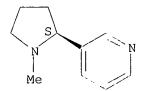
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (addiction; dextromethorphan and metabolite dextrorphan block .alpha.3.beta.

4 neuronal nicotinic receptors)

RN 54-11-5 HCAPLUS

Pyridine, 3-[(2S)-1-methyl-2-pyrrolidinyl]- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (-).



#### ΙT 125-71-3, Dextromethorphan 125-73-5,

Dextrorphan

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dextromethorphan and metabolite dextrorphan block

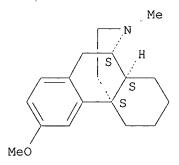
.alpha.3.beta.4 neuronal

nicotinic receptors)

RN 125-71-3 HCAPLUS

Morphinan, 3-methoxy-17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) CN (CA INDEX NAME)

Absolute stereochemistry.



RN 125-73-5 HCAPLUS

Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA CN INDEX NAME)

Me S S

=> fil reg FILE 'REGISTRY' ENTERED AT 16:44:50 ON 10 MAR 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the  ${\tt ZIC/VINITI}$  data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 MAR 2003 HIGHEST RN 497220-90-3 DICTIONARY FILE UPDATES: 9 MAR 2003 HIGHEST RN 497220-90-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can tot 1106

L106 ANSWER 1 OF 21 REGISTRY COPYRIGHT 2003 ACS

RN **444143-82-2** REGISTRY

CN Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C17 H23 N O . C11 H21 N

CI MXS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 125-73-5 CMF C17 H23 N O

CM 2

CRN 60-40-2 CMF C11 H21 N

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:119689

L106 ANSWER 2 OF 21 REGISTRY COPYRIGHT 2003 ACS

RN **444143-81-1** REGISTRY

CN Morphinan, 3-methoxy-17-methyl-, (9.alpha.,13.alpha.,14.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C18 H25 N O . C11 H21 N

CI MXS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 125-71-3 CMF C18 H25 N O

CM 2

CRN 60-40-2 CMF C11 H21 N

1 REFERENCES IN FILE CAPILIS (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:119689

L106 ANSWER 3 OF 21 REGISTRY COPYRIGHT 2003 ACS

RN **266686-77-5** REGISTRY

CN Ibogamine-18-carboxylic acid, 21-methoxy-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (-)-18-Methoxycoronaridine hydrochloride

FS STEREOSEARCH

MF C22 H28 N2 O3 . C1 H

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, DRUGUPDATES, TOXCENTER, USPATFULL

CRN (308123-60-6)

Absolute stereochemistry. Rotation (-).

## HCl

3 REFERENCES IN FILE CA (1962 TO DATE)

3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:119689

REFERENCE 2: 135:318602

REFERENCE 3: 132:322018

L106 ANSWER 4 OF 21 REGISTRY COPYRIGHT 2003 ACS

RN **266686-75-3** REGISTRY

CN Ibogamine-18-carboxylic acid, 21-methoxy-, methyl ester, monohydrochloride, (2.alpha.,4.alpha.,5.beta.,6.alpha.,18.beta.)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (+)-18-Methoxycoronaridine hydrochloride

FS STEREOSEARCH

MF C22 H28 N2 O3 . C1 H

SR CA

LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

CRN (308123-59-3)

Absolute stereochemistry. Rotation (+).

HC1

3 REFERENCES IN FILE CA (1962 TO DATE)

3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:119689

2: 135:318602 REFERENCE 3: 132:322018 REFERENCE L106 ANSWER 5 OF 21 REGISTRY COPYRIGHT 2003 ACS RN **34911-55-2** REGISTRY CN 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: 1-Propanone, 1-(3-chlorophenyl)-2-[(1,1-dimethylethyl)amino]-, (.+-.)-OTHER NAMES: CN (.+-.)-Bupropion CN .alpha.-(tert-Butylamino)-m-chloropropiophenone CN Amfebutamon CN Amfebutamone CN Bupropion DR 34841-39-9 MF C13 H18 C1 N O CI COM LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CBNB, CHEMCATS, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, PHAR, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL (\*File contains numerically searchable property data)

Other Sources:

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

478 REFERENCES IN FILE CA (1962 TO DATE)
9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
482 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:147554 REFERENCE 2: 138:147499 138:130984 REFERENCE 3: REFERENCE 4: 138:130913 REFERENCE 5: 138:117464 REFERENCE 6: 138:101071 REFERENCE 7: 138:66716 REFERENCE 8: 138:66689

9: 138:61356

REFERENCE

REFERENCE 10: 138:61315

L106 ANSWER 6 OF 21 REGISTRY COPYRIGHT 2003 ACS

RN 28297-73-6 REGISTRY

CN Benzeneethanamine, N,.alpha.-dimethyl-, (.alpha.S)-, sulfate (2:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzeneethanamine, N, .alpha.-dimethyl-, (S)-, sulfate (2:1)

CN Phenethylamine, N, .alpha.-dimethyl-, sulfate (2:1), (+)- (8CI)

OTHER NAMES:

CN (+)-Methamphetamine sulfate

CN Methamphetamine sulfate

FS STEREOSEARCH

MF C10 H15 N . 1/2 H2 O4 S

LC STN Files: BEILSTEIN\*, BIOSIS, BIOTECHNO, CA, CAPLUS, EMBASE, TOXCENTER, USPATFULL

(\*File contains numerically searchable property data)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 537-46-2 CMF C10 H15 N

Absolute stereochemistry. Rotation (+).

7 REFERENCES IN FILE CA (1962 TO DATE)

7 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:119689

REFERENCE 2: 93:215173

REFERENCE 3: 86:183262

REFERENCE 4: 86:50646

REFERENCE 5: 84:173762

REFERENCE 6: 77:122141

REFERENCE 7: 72:77108

L106 ANSWER 7 OF 21 REGISTRY COPYRIGHT 2003 ACS

```
RN
     826-39-1 REGISTRY
     Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI)
CN
      (CA INDEX NAME)
OTHER CA INDEX NAMES:
     2-Norbornanamine, N,2,3,3-tetramethyl-, hydrochloride (8CI)
CN
OTHER NAMES:
CN
     Inversine
CN
     Mecamylamine chloride
CN
     Mecamylamine hydrochloride
CN
     Mevasin
CN
     Mevasine
     N, 2, 3, 3-Tetramethyl-2-norbornanamine hydrochloride
CN
MF
     C11 H21 N . C1 H
CI
     COM
                    AGRICOLA, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS,
LC
     STN Files:
       CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DIOGENES, EMBASE, HODOC^*, IPA, MRCK^*, PROMT, RTECS^*, TOXCENTER, USAN, USPATFULL
          (*File contains numerically searchable property data)
                         EINECS**
          (**Enter CHEMLIST File for up-to-date regulatory information)
CRN
     (60-40-2)
```

HC1

158 REFERENCES IN FILE CAPLUS (1962 TO DATE) 10 REFERENCES IN FILE CAOLD (PRIOR TO 1967) REFERENCE 1: 137:210809 REFERENCE 2: 137:119689 REFERENCE 136:156476 REFERENCE 136:156475 REFERENCE 136:11105 REFERENCE 6: 133:242669 REFERENCE 7: 132:293042 REFERENCE 8: 131:633 REFERENCE 9: 130:252506 REFERENCE 10: 130:10535

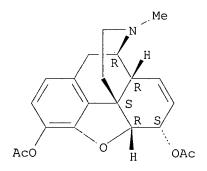
L106 ANSWER 8 OF 21 REGISTRY COPYRIGHT 2003 ACS

158 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

```
RN
     561-27-3 REGISTRY
     Morphinan-3, 6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-
CN
     (5.alpha., 6.alpha.) -, diacetate (ester) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Morphinan-3, 6.alpha.-diol, 7,8-didehydro-4,5.alpha.-epoxy-17-methyl-,
     diacetate (ester) (8CI)
OTHER NAMES:
CN
     3,6-Diacetylmorphine
CN
     3,6-O-Diacetylmorphine
CN
     Acetomorphin
CN
     Acetomorphine
CN
     China white
CN
     Diacetylmorphine
CN
     Diamorphine
     Diaphorm
CN
     Eclorion
CN
     Heroin
CN
     Morphacetin
CN
CN
     Preza
FS
     STEREOSEARCH
DR
     2078-90-2
MF
     C21 H23 N O5
CI
LC
                   ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
     STN Files:
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,
       CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT,
       NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2,
       USPATFULL
          (*File contains numerically searchable property data)
     Other Sources:
                        EINECS**
          (**Enter CHEMLIST File for up-to-date regulatory information)
```

## Absolute stereochemistry.



#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2160 REFERENCES IN FILE CA (1962 TO DATE)
36 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2165 REFERENCES IN FILE CAPLUS (1962 TO DATE)
18 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:149691
REFERENCE 2: 138:132331
REFERENCE 3: 138:132323

REFERENCE 4: 138:130994

```
138:130993
REFERENCE
            5:
            6:
                138:130957
REFERENCE
            7:
                138:130455
REFERENCE
REFERENCE
            8:
                138:122643
                138:118594
REFERENCE
            9:
REFERENCE 10:
                138:117517
L106 ANSWER 9 OF 21 REGISTRY COPYRIGHT 2003 ACS
     537-46-2 REGISTRY
     Benzeneethanamine, N, .alpha.-dimethyl-, (.alpha.S)- (9CI)
                                                                  (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     Benzeneethanamine, N,.alpha.-dimethyl-, (S)-
CN
     Phenethylamine, N, .alpha.-dimethyl-, (S)-(+)-(8CI)
OTHER NAMES:
CN
     (+)-(S)-Deoxyephedrine
CN
     (+)-2-(N-Methylamino)-1-phenylpropane
CN
     (+)-Methamphetamine
CN
     (+)-Methylamphetamine
     (+)-N,.alpha.-Dimethyl-.beta.-phenylethylamine
CN
CN
     (+)-N-Methylamphetamine
CN
     (S) - (+) - Deoxyephedrine
CN
     (S) - (+) - Methamphetamine
CN
     (S)-Methamphetamine
CN
     (S)-Methylamphetamine
CN
     2S-(+)-Methamphetamine
CN
     d-(S)-Methamphetamine
CN
     d-Deoxyephedrine
CN
     d-Desoxyephedrine
CN
     d-Methamphetamine
CN
     d-Methylamphetamine
CN
     d-N, .alpha. - Dimethylphenethylamine
CN
     d-N-Methylamphetamine
CN
     d-Phenylisopropylmethylamine
CN
     L-Methamphetamine
CN
     Metamfetamine
CN
     Metamphetamine
CN
     Methamphetamine
CN
     Methyl-.beta.-phenylisopropylamine
CN
     Methylamphetamine
CN
     N-Methyl-1-phenyl-2-propanamine
CN
     N-Methylamphetamine
CN
     Norodin
FS
     STEREOSEARCH
     139-47-9, 1690-86-4, 14611-50-8, 45952-89-4
DR
MF
     C10 H15 N
CI
     COM
LC
                  ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
     STN Files:
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
       CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, HODOC*,
       HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PIRA,
       PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: EINECS**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry. Rotation (+).

```
Ph S Me
```

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3409 REFERENCES IN FILE CA (1962 TO DATE)

79 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

3422 REFERENCES IN FILE CAPLUS (1962 TO DATE)

19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:148798

REFERENCE 2: 138:147614

REFERENCE 3: 138:147591

REFERENCE 4: 138:147588

REFERENCE 5: 138:147587

REFERENCE 6: 138:147580

REFERENCE 7: 138:147577

REFERENCE 8: 138:147574

REFERENCE 9: 138:147573

REFERENCE 10: 138:147552

L106 ANSWER 10 OF 21 REGISTRY COPYRIGHT 2003 ACS

RN 467-77-6 REGISTRY

CN Ibogamine-18-carboxylic acid, methyl ester (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN 6,9-Methano-5H-pyrido[1',2':1,2]azepino[4,5-b]indole, ibogamine-18-carboxylic acid deriv.

CN Coronaridine (6CI, 7CI, 8CI)

OTHER NAMES:

CN (-)-Coronaridine

CN Coronaridin

FS STEREOSEARCH

DR 53368-34-6, 53777-64-3

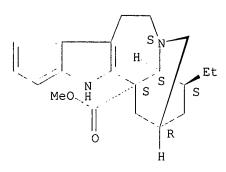
MF C21 H26 N2 O2

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMLIST, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, NAPRALERT, SPECINFO, TOXCENTER, USPATFULL

(\*File contains numerically searchable property data)
Other Sources: EINECS\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

```
189 REFERENCES IN FILE CA (1962 TO DATE)
189 REFERENCES IN FILE CAPLUS (1962 TO DATE)
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
```

```
REFERENCE
                137:229149
REFERENCE
                137:134941
REFERENCE
                137:119689
REFERENCE
                137:44252
REFERENCE
                137:17724
REFERENCE
                136:111971
            6:
                136:99153
REFERENCE
            7:
REFERENCE
            8:
                135:339094
REFERENCE
            9:
                135:221260
REFERENCE
           10:
                135:164699
L106 ANSWER 11 OF 21 REGISTRY COPYRIGHT 2003 ACS
RN
     300-62-9 REGISTRY
     Benzeneethanamine, .alpha.-methyl- (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
CN
     Benzeneethanamine, .alpha.-methyl-, (.+-.)-
CN
     Phenethylamine, .alpha.-methyl-, (.+-.)- (8CI)
OTHER NAMES:
CN
     (.+-.)-.alpha.-Methylphenethylamine
CN
     (.+-.)-.alpha.-Methylphenylethylamine
CN
     (.+-.)-.beta.-Phenylisopropylamine
CN
     (.+-.)-1-Phenyl-2-aminopropane
CN
     (.+-.)-Desoxynorephedrine
CN
     (.+-.)-Phenylisopropylamine
CN
     .alpha.-Methyl-.beta.-phenylethylamine
     .alpha.-Methylbenzeneethanamine
CN
CN
     .alpha.-Methylphenethylamine
CN
     .alpha.-Methylphenylethylamine
CN
     .beta.-Aminopropylbenzene
CN
     .beta.-Phenylisopropylamine
CN
     1-Benzylethylamine
CN
     1-Methyl-2-phenylethylamine
CN
     1-Phenyl-2-aminopropane
```

```
CN
      1-Phenyl-2-propanamine
CN
      1-Phenyl-2-propylamine
CN
      2-Amino-1-phenylpropane
CN
     3-Phenyl-2-propylamine
CN
     Actedron
CN
     Adderall
CN
     Adderall XR
CN
     Adipan
CN
     Allodene
CN
     Amfetamine
CN
     Amphetamine
CN
     Anorexine
CN
     Benzebar
     Benzedrine
CN
CN
     Benzolone
CN
     Desoxynorephedrine
CN
     dl-.alpha.-Methylphenethylamine
CN
     Elastonon
CN
     Fenopromin
CN
     Finam
CN
     Isoamyne
CN
     Isomyn
CN
     Mecodrin
CN
     Norephedrane
CN
     Novydrine
CN
     Obesin
CN
     Obesine
CN
     Oktedrin
CN
     Ortedrine
CN
     Percomon
CN
     Phenamine
CN
     Phenedrine
CN
     Profamina
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
FS
     3D CONCORD
DR
     60-15-1, 17108-96-2, 96332-84-2
MF
     C9 H13 N
CI
     COM
LC
     STN Files:
                    ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
        BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHARMASEARCH, PIRA, PROMT,
        RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
          (*File contains numerically searchable property data)
     Other Sources:
                         DSL**, EINECS**, TSCA**, WHO
          (**Enter CHEMLIST File for up-to-date regulatory information)
    NH2
Me-CH-CH2-Ph
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
              6575 REFERENCES IN FILE CA (1962 TO DATE)
               461 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
```

6590 REFERENCES IN FILE CAPLUS (1962 TO DATE) 5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
REFERENCE
            1:
                138:153500
REFERENCE
            2:
                138:153411
REFERENCE
            3:
                138:150817
REFERENCE
            4:
                138:148885
REFERENCE
            5:
                138:148798
REFERENCE
                138:147755
            6:
REFERENCE
            7:
                138:147720
                138:147572
REFERENCE
            8:
REFERENCE
                138:147518
            9:
REFERENCE 10:
                138:146984
L106 ANSWER 12 OF 21 REGISTRY COPYRIGHT 2003 ACS
RN
     125-73-5 REGISTRY
     Morphinan-3-ol, 17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA
CN
     INDEX NAME)
OTHER CA INDEX NAMES:
     9.alpha., 13.alpha., 14.alpha.-Morphinan-3-ol, 17-methyl- (8CI)
OTHER NAMES:
     (+)-3-Hydroxy-N-methylmorphinan
CN
CN
     (+)-Dromoran
CN
     (+)-N-Methylmorphinan-3-ol
CN
     d-Levorphanol
CN
     dextro-Dromoran
CN
     Dextrorphan
CN
     O-Demethyldextromethorphan
CN
     Ro 1-6794
FS
     STEREOSEARCH
MF
     C17 H23 N O
CI
     COM
LC
     STN Files:
                 ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT,
       IFIUDB, IPA, MEDLINE, MRCK*, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2,
       USPATFULL
         (*File contains numerically searchable property data)
                     EINECS**, WHO
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

#### 587 REFERENCES IN FILE CA (1962 TO DATE) 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 587 REFERENCES IN FILE CAPLUS (1962 TO DATE) 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967) 1: 138:100318 REFERENCE REFERENCE 2: 138:66586 REFERENCE 137:304240 137:257212 REFERENCE 4: 137:242132 REFERENCE 5: 137:227829 REFERENCE 6: REFERENCE 7: 137:226632 REFERENCE 8: 137:226631 REFERENCE 9: 137:226630 REFERENCE 10: 137:119689 L106 ANSWER 13 OF 21 REGISTRY COPYRIGHT 2003 ACS RN **125-71-3** REGISTRY CN Morphinan, 3-methoxy-17-methyl-, (9.alpha.,13.alpha.,14.alpha.)- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: 9.alpha.,13.alpha.,14.alpha.-Morphinan, 3-methoxy-17-methyl- (8CI) OTHER NAMES: CN (+)-3-Methoxy-17-methylmorphinan 14: PN: WO02073205 FIGURE: 8 claimed sequence CN CN Ba 2666 d-Methorphan CN CN DEX CN Dextromethorphan CN Nodex FS STEREOSEARCH 18046-32-7, 32062-10-5 DR C18 H25 N O MF CI COM LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, NIOSHTIC, PHAR, PROMT, RTECS\*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU (\*File contains numerically searchable property data) EINECS\*\*, WHO Other Sources: (\*\*Enter CHEMLIST File for up-to-date regulatory information) Absolute stereochemistry.

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1239 REFERENCES IN FILE CA (1962 TO DATE)

30 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1241 REFERENCES IN FILE CAPLUS (1962 TO DATE) 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:131062

REFERENCE 2: 138:127069

REFERENCE 3: 138:121374

REFERENCE 4: 138:117565

REFERENCE 5: 138:117244

REFERENCE 6: 138:112443

REFERENCE 7: 138:100318

REFERENCE 8: 138:95638

REFERENCE 9: 138:83227

REFERENCE. 10: 138:83226

L106 ANSWER 14 OF 21 REGISTRY COPYRIGHT 2003 ACS

RN 125-69-9 REGISTRY

CN Morphinan, 3-methoxy-17-methyl-, hydrobromide,

(9.alpha., 13.alpha., 14.alpha.) - (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

OTHER NAMES:

CN Antussan

CN d-3-Methoxy-N-methylmorphinan hydrobromide

CN d-Methorphan hydrobromide

CN Delsym

CN Demorphan

CN Demorphine

CN Dextromethorphan bromide

CN Dextromethorphan hydrobromide

CN Dormetan

CN Dormethan

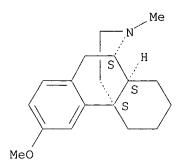
CN Medicon

CN Methorate hydrobromide

CN Metrorat

Ro 1-5470 CN CN Romilar CN Tusilan CN Tussade FS STEREOSEARCH DR 18651-95-1 MF C18 H25 N O . Br H CI COM LC STN Files: ADISNEWS, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DIOGENES, EMBASE, IFICDB, IFIPAT, IFIUDB, MRCK\*, MSDS-OHS, PHAR, PHARMASEARCH, PROMT, RTECS\*, TOXCENTER, USAN, USPAT2, USPATFULL (\*File contains numerically searchable property data) EINECS\*\* Other Sources: (\*\*Enter CHEMLIST File for up-to-date regulatory information) CRN (125-71-3)

Absolute stereochemistry.



### HBr

334 REFERENCES IN FILE CA (1962 TO DATE)
7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
336 REFERENCES IN FILE CAPLUS (1962 TO DATE)
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:158841

REFERENCE 2: 138:19521

REFERENCE 3: 138:8344

REFERENCE 4: 137:375291

REFERENCE 5: 137:329458

REFERENCE 5: 137:329458

REFERENCE 6: 137:299959

REFERENCE 7: 137:175098

REFERENCE 8: 137:119689

REFERENCE 9: 137:68208

REFERENCE 10: 137:68189

L106 ANSWER 15 OF 21 REGISTRY COPYRIGHT 2003 ACS RN 83-74-9 REGISTRY

```
Ibogamine, 12-methoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     6,9-Methano-5H-pyrido[1',2':1,2]azepino[4,5-b]indole, ibogamine deriv..
CN
     Iboqaine (7CI, 8CI)
CN
OTHER NAMES:
     (-)-Ibogaine
CN
CN
     Ibogain
     STEREOSEARCH
FS
DR
     17378-46-0
MF
     C20 H26 N2 O
CI
     COM
                  AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,
       CHEMLIST, CIN, CSCHEM, DDFU, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, HODOC*,
       IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, PROMT, RTECS*,
       SPECINFO, TOXCENTER, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: EINECS**
```

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

331 REFERENCES IN FILE CA (1962 TO DATE)
7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
331 REFERENCES IN FILE CAPLUS (1962 TO DATE)
22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:130452 REFERENCE 2: 137:315860 137:163719 REFERENCE REFERENCE 4: 137:150063 REFERENCE 5: 137:134941 REFERENCE 6: 137:83652 REFERENCE 7: 137:17724 REFERENCE 8: 136:363873

9:

136:111979

REFERENCE

# REFERENCE 10: 136:111978

```
L106 ANSWER 16 OF 21 REGISTRY COPYRIGHT 2003 ACS
     64-31-3 REGISTRY
RN
     Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-
CN
     (5.alpha., 6.alpha.)-, sulfate (2:1) (salt) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Morphinan-3, 6.alpha.-diol, 7,8-didehydro-4,5.alpha.-epoxy-17-methyl-,
     sulfate (2:1) (salt) (8CI)
OTHER NAMES:
     Avinza
CN
CN
     Capros
CN
     Duramorph
CN
     Kapanol
CN
     1-Morphine sulfate
CN
     Morphelan
     Morphine sulfate
CN
CN
     Morphine sulphate
CN
     Moscontin
CN
     MST
CN
     MST Continus
     NIH 0001
CN
     NIH 10753
CN
CN
     Oblioser
CN
     Oramorph
CN
     Relipain
CN
     Roxanol
CN
     Skenan
FS
     STEREOSEARCH
DR
     1095-53-0, 178935-96-1
MF
     C17 H19 N O3 . 1/2 H2 O4 S
CI
     COM
LC
     STN Files:
                 ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
       BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB,
       CHEMCATS, CHEMLIST, CIN, CSNB, DIOGENES, EMBASE, HSDB*, MRCK*, MSDS-OHS,
       NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, TOXCENTER, USAN,
       USPAT2, USPATFULL
         (*File contains numerically searchable property data)
                      DSL**, EINECS**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
     CM
          1
     CRN
          7664-93-9
          H2 O4 S
     CMF
   0
HO-
   S
     OH-
   0
     CM
     CRN
         57-27-2
         C17 H19 N O3
     CMF
Absolute stereochemistry. Rotation (-).
```

```
2328 REFERENCES IN FILE CA (1962 TO DATE)
```

2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2329 REFERENCES IN FILE CAPLUS (1962 TO DATE)

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:147161

REFERENCE 2: 138:137525

REFERENCE 3: 138:132324

REFERENCE 4: 138:130939

REFERENCE 5: 138:100838

REFERENCE 6: 138:49760

REFERENCE 7: 138:49341

REFERENCE 8: 138:33239

REFERENCE 9: 138:11332

REFERENCE 10: 137:389151

L106 ANSWER 17 OF 21 REGISTRY COPYRIGHT 2003 ACS

RN **64-17-5** REGISTRY

CN Ethanol (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethyl alcohol (6CI, 7CI, 8CI)

OTHER NAMES:

CN 100C.NPA

CN AHD 2000

CN Alcare Hand Degermer

CN Alcohol

CN Alcohol anhydrous

CN Algrain

CN Anhydrol

CN Anhydrol PM 4085

CN Desinfektol EL

CN Duplicating Fluid 100C.NPA

CN Esumiru WK 88

CN Ethicap

CN Ethyl hydrate

CN Ethyl hydroxide

CN Hinetoless

CN IMS 99

CN Jaysol

CN Jaysol S

```
CN
     Lux
CN
     Methylcarbinol
CN
     Molasses alcohol
CN
     Potato alcohol
     SDA 3A
CN
     SDA 40-2
CN
CN
     SY Fresh M
CN
     Synasol
CN
     Tecsol
CN
     Tecsol C
FS
     3D CONCORD
     8000-16-6, 8024-45-1, 121182-78-3
DR
MF
     C2 H6 O
CI
     COM
LC
     STN Files:
                    ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
        BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,
        CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,
        DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,
       ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB •
          (*File contains numerically searchable property data)
                        DSL**, EINECS**, TSCA**
     Other Sources:
          (**Enter CHEMLIST File for up-to-date regulatory information)
H_3C-CH_2-OH
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
           144662 REFERENCES IN FILE CA (1962 TO DATE)
             1120 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           144645 REFERENCES IN FILE CAPLUS (1962 TO DATE)
                11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
REFERENCE
             1: 138:162713
REFERENCE
             2: 138:162704
REFERENCE
             3:
                 138:162703
REFERENCE
             4:
                 138:162687
REFERENCE
             5:
                 138:162681
                 138:162573
REFERENCE
             6:
REFERENCE
             7:
                 138:162325
REFERENCE
             8:
                 138:162324
REFERENCE
             9:
                  138:162323
REFERENCE 10: 138:162314
L106 ANSWER 18 OF 21 REGISTRY COPYRIGHT 2003 ACS
RN
     60-40-2 REGISTRY
     Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl- (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     2-Norbornanamine, N, 2, 3, 3-tetramethyl- (8CI)
```

```
OTHER NAMES:
```

CN 2-(Methylamino)-2,3,3-trimethylnorborane

CN 2-(Methylamino)isocamphane

CN 3-(Methylamino)-2,2,3-trimethylbicyclo[2.2.1]heptane

CN 3-(Methylamino)isocamphane

CN Mecamine

CN Mecamylamine

CN N, 2, 3, 3-Tetramethyl-2-norbornanamine

CN N, 2, 3, 3-Tetramethyl-2-norcamphanamine

CN N-Methyl-2-isocamphanamine

CN Revertina

FS 3D CONCORD

MF C11 H21 N

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, NIOSHTIC, PHAR, PROMT, RTECS\*, SPECINFO, TOXCENTER, USAN, USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

616 REFERENCES IN FILE CA (1962 TO DATE)

4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

616 REFERENCES IN FILE CAPLUS (1962 TO DATE)

22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:117050

REFERENCE 2: 138:66592

REFERENCE 3: 138:66514

REFERENCE 4: 138:540

REFERENCE 5: 137:362410

REFERENCE 6: 137:320180

REFERENCE 7: 137:304675

REFERENCE 8: 137:257857

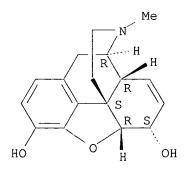
REFERENCE 9: 137:210824

REFERENCE 10: 137:210792

L106 ANSWER 19 OF 21 REGISTRY COPYRIGHT 2003 ACS

```
57-27-2 REGISTRY
RN
     Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-
CN
     (5.alpha., 6.alpha.) - (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Morphinan-3, 6. alpha.-diol, 7,8-didehydro-4,5.alpha.-epoxy-17-methyl- (8CI)
OTHER NAMES:
CN
     (-)-Morphine
CN
     Dulcontin
CN
     Duromorph
CN
     1-Morphine
CN
     Meconium
CN
     Morphia
CN
     Morphin
CN
     Morphina
CN
     Morphine
CN
     Morphinism
CN
     Morphinum
CN
     Morphium
CN
     MS Contin
CN
     Nepenthe
CN
     Ospalivina
FS
     STEREOSEARCH
     8053-16-5, 85201-37-2, 47106-99-0
DR
MF
     C17 H19 N O3
CI
LC
                   ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
     STN Files:
       BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT,
       CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB,
       IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC,
       PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN,
       USPAT2, USPATFULL, VETU
          (*File contains numerically searchable property data)
     Other Sources:
                        EINECS**
          (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry. Rotation (-).



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

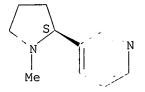
20068 REFERENCES IN FILE CA (1962 TO DATE)
241 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
20095 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:158859

REFERENCE 2: 138:149691

REFERENCE 3: 138:148048

```
REFERENCE
              4: 138:147677
REFERENCE
              5:
                 138:147610
REFERENCE
              6:
                 138:147590
              7: 138:147568
REFERENCE
              8:
                 138:147550
REFERENCE
REFERENCE
              9:
                 138:147531
REFERENCE 10: 138:147171
L106 ANSWER 20 OF 21 REGISTRY COPYRIGHT 2003 ACS
      54-11-5 REGISTRY
RN
CN
      Pyridine, 3-[(2S)-1-methyl-2-pyrrolidinyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Nicotine (8CI)
CN
CN
      Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-
OTHER NAMES:
      (-)-.beta.-Pyridyl-.alpha.-N-methylpyrrolidine
CN
CN
      (-)-3-(1-Methyl-2-pyrrolidyl)pyridine
CN
      (-)-Nicotine
CN
      (S) - (-) - Nicotine
      (S) -3-(1-Methyl-2-pyrrolidinyl)pyridine
CN
CN
      (S) -Nicotine
CN
     Flux Maag
CN
     Habitrol
CN
     L-Nicotine
CN
     1-Nicotine
CN
     Nicabate
CN
     Nicoderm
CN
     Nicolan
CN
     Niconil
CN
     Nicopatch
CN
     Nicorette
     Nicotell TTS
CN
CN
     Nicotin
CN
     Nicotinell
CN
     Tabazur
CN
     XL All Insecticide
FS
      STEREOSEARCH
DR
      13890-81-8, 13890-82-9, 6912-85-2, 551-13-3, 16760-37-5
MF
     C10 H14 N2
CI
                     ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
LC
      STN Files:
        BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,
        DDFU, DETHERM*, DIOGENES, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, GMELIN*,
       HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU
           (*File contains numerically searchable property data)
                         DSL**, EİNECS**, TSCA**
      Other Sources:
           (**Enter CHEMLIST File for up-to-date regulatory information)
Absolute stereochemistry. Rotation (-).
```



RN

CN

FS

DR

MF

CI

C17 H21 N O4

COM

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

```
12435 REFERENCES IN FILE CA (1962 TO DATE)
             232 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           12448 REFERENCES IN FILE CAPLUS (1962 TO DATE)
               3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
REFERENCE
            1: 138:157812
REFERENCE
            2:
                138:153704
REFERENCE
            3:
                138:151488
                138:148949
REFERENCE
            4:
REFERENCE
                138:148931
            5:
REFERENCE
                138:148758
            6:
REFERENCE
            7:
                138:148039
                138:147617
REFERENCE
            8:
REFERENCE
            9:
                138:147592
REFERENCE
          10:
                138:147584
L106 ANSWER 21 OF 21 REGISTRY COPYRIGHT 2003 ACS
     50-36-2 REGISTRY
     8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-,
     methyl ester, (1R, 2R, 3S, 5S) - (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     1.alpha.H, 5.alpha.H-Tropane-2.beta.-carboxylic acid, 3.beta.-hydroxy-,
     methyl ester, benzoate (ester) (8CI)
     8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-,
     methyl ester, [1R-(exo,exo)]-
OTHER NAMES:
     (-)-Cocaine
     (R)-Cocaine
     2.beta.-Carbomethoxy-3.beta.-(benzoyloxy)tropane
     3.beta.-Hydroxy-2.beta.-tropanecarboxylic acid methyl ester benzoate
     (ester)
     Benzoylmethylecgonine
     Cocain
     Cocaine
     Ecgonine methyl ester benzoate (ester)
     L-Cocaine
     1-Cocaine
     Neurocaine
     STEREOSEARCH
     60269-50-3
```

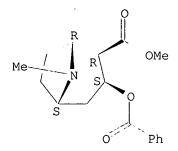
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (-).



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9786 REFERENCES IN FILE CA (1962 TO DATE)
262 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9803 REFERENCES IN FILE CAPLUS (1962 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:148778

REFERENCE 2: 138:147755

REFERENCE 3: 138:147596

REFERENCE 4: 138:147591

REFERENCE 5: 138:147581

REFERENCE 6: 138:147575

REFERENCE 7: 138:147534

REFERENCE 8: 138:147523

REFERENCE 9: 138:147522

REFERENCE 10: 138:147521

### => fil medline

FILE 'MEDLINE' ENTERED AT 17:01:04 ON 10 MAR 2003

FILE LAST UPDATED: 8 MAR 2003 (20030308/UP). FILE COVERS 1958 TO DATE.

On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2003 vocabulary. See http://www.nlm.nih.gov/mesh/summ2003.html for a description on changes.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> d all tot
L135 ANSWER 1 OF 2
                       MEDLINE
ΑN
     2002396133
                    MEDLINE
     22140091 PubMed ID: 12144940
DN
TΤ
    Modulation of nicotine self-administration in rats by combination therapy
    with agents blocking alpha 3 beta 4
    nicotinic receptors.
    Glick Stanley D; Maisonneuve Isabelle M; Kitchen Barbara A
ΑU
CS
     Center for Neuropharmacology and Neuroscience, Albany Medical College
     (MC-136), 47 New Scotland Avenue, Albany, NY 12208, USA..
    glicks@mail.amc.edu
NC
     DA 03817 (NIDA)
    EUROPEAN JOURNAL OF PHARMACOLOGY, (2002 Jul 19) 448 (2-3) 185-91.
SO
     Journal code: 1254354. ISSN: 0014-2999.
CY
    Netherlands
    Journal; Article; (JOURNAL ARTICLE)
DT
    English
LA
FS
    Priority Journals
     200302
EM
ΕD
    Entered STN: 20020730
    Last Updated on STN: 20030214
    Entered Medline: 20030212
    18-Methoxycoronaridine, a novel iboga alkaloid
AB
    congener that decreases drug self-administration in several animal models,
    may be a potential treatment for multiple forms of drug abuse. In previous
    work, 18-methoxycoronaridine was found to be a
     somewhat selective antagonist at alpha3beta4 nicotinic
    receptors; and low dose combinations of 18-
    methoxycoronaridine with other drugs known to have the same action
     (e.g., mecamylamine, dextromethorphan) decreased both
    morphine and methamphetamine self-administration in rats at doses that
    were ineffective if administered alone. In the present study, similar drug
     combinations (but including bupropion as well) were found to
    decrease nicotine self-administration in rats. The data further support
     the hypothesis that diencephalic pathways having high densities of
     alpha3beta4 nicotinic receptors modulate
    mesocorticolimbic pathways more directly involved in drug reinforcement.
    Antagonists of alpha3beta4 nicotinic receptors
    may represent a totally novel approach to treating polydrug abuse.
    Copyright 2002 Elsevier Science B.V.
CT
    Check Tags: Animal; Female; Support, U.S. Gov't, P.H.S.
      Dose-Response Relationship, Drug
        Drug Therapy, Combination
     *Nicotine: PD, pharmacology
       *Nicotinic Antagonists: PD, pharmacology
      Rats
      Rats, Long-Evans
       *Receptors, Nicotinic: PH, physiology
      Self Administration: PX, psychology
RN
     54-11-5 (Nicotine)
     0 (Nicotinic Antagonists); 0 (Receptors, Nicotinic); 0 (nicotinic
CN
     receptor alpha3beta4)
L135 ANSWER 2 OF 2
                       MEDLINE
AN
    2002174549
                    MEDLINE
DN
              PubMed ID: 11906717
     21904155
TΤ
     Antagonism of alpha 3 beta 4
```

nicotinic receptors as a strategy to reduce opioid and

stimulant self-administration. ΑU Glick Stanley D; Maisonneuve Isabelle M; Kitchen Barbara A; Fleck Mark W CS Center for Neuropharmacology and Neuroscience, Albany Medical College (MC-136), 47 New Scotland Avenue, Albany, NY 12208, USA.. glicks@mail.amc.edu NC DA 03817 (NIDA) SO EUROPEAN JOURNAL OF PHARMACOLOGY, (2002 Mar 1) 438 (1-2) 99-105. Journal code: 1254354. ISSN: 0014-2999. CY Netherlands DT Journal; Article; (JOURNAL ARTICLE) LA English Priority Journals FS EΜ 200205 ED Entered STN: 20020322 Last Updated on STN: 20020602 Entered Medline: 20020531 AΒ The iboga alkaloid ibogaine and the novel iboga alkaloid congener 18-methoxycoronaridine are putative anti-addictive agents. Using patch-clamp methodology, the actions of ibogaine and 18-methoxycoronaridine at various neurotransmitter receptor ion-channel subtypes were determined. Both ibogaine and 18-methoxycoronaridine were antagonists at alpha 3 beta 4 nicotinic receptors and both agents were more potent at this site than at alpha 4 beta 2 nicotinic receptors or at NMDA or 5-HT(3) receptors; 18-methoxycoronaridine was more selective in this regard than ibogaine. In studies of morphine and methamphetamine self-administration, the effects of low dose combinations of 18-methoxycoronaridine with mecamylamine or dextromethorphan and of mecamylamine with dextromethorphan were assessed. Mecamylamine and dextromethorphan have also been shown to be antagonists at alpha 3 beta 4 nicotinic receptors. All three drug combinations decreased both morphine and methamphetamine self-administration at doses that were ineffective if administered alone. The data are consistent with the hypothesis that antagonism at alpha 3 beta 4 receptors is a potential mechanism to modulate drug seeking behavior. 18-Methoxycoronaridine apparently has greater selectivity for this site than other agents and may be the first of a new class of synthetic agents acting via this novel mechanism to produce a broad spectrum of anti-addictive activity. CTCheck Tags: Animal; Female; Human; Support, U.S. Gov't, P.H.S. Acetylcholine: PD, pharmacology Cell Line Dose-Response Relationship, Drug Excitatory Amino Acid Antagonists: PD, pharmacology Gene Expression \*Ibogaine: AA, analogs & derivatives Ibogaine: PD, pharmacology Membrane Potentials: DE, drug effects \*Narcotics: AD, administration & dosage Rats Rats, Long-Evans Receptors, N-Methyl-D-Aspartate: AI, antagonists & inhibitors Receptors, N-Methyl-D-Aspartate: PH, physiology \*Receptors, Nicotinic: DE, drug effects Receptors, Nicotinic: GE, genetics Receptors, Nicotinic: PH, physiology Receptors, Serotonin: DE, drug effects Receptors, Serotonin: PH, physiology Self Administration RN 51-84-3 (Acetylcholine); **83-74-9 (Ibogaine)** 

CN 0 (18-methoxycoronaridine); 0 (Excitatory Amino Acid Antagonists); 0 (Narcotics); 0 (Receptors, N-Methyl-D-Aspartate); 0 (Receptors, Nicotinic); 0 (Receptors, Serotonin); 0 (serotonin 3 receptor) => fil wpix FILE 'WPIX' ENTERED AT 17:07:42 ON 10 MAR 2003 COPYRIGHT (C) 2003 THOMSON DERWENT 7 MAR 2003 FILE LAST UPDATED: <20030307/UP> 200316 MOST RECENT DERWENT UPDATE: <200316/DW> DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE >>> SLART (Simultaneous Left and Right Truncation) is now available in the /ABEX field. An additional search field /BIX is also provided which comprises both /BI and /ABEX <<< >>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<< >>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://www.derwent.com/dwpi/updates/dwpicov/index.html <<</pre> >>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT: http://www.stn-international.de/training center/patents/stn guide.pdf <<< >>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER GUIDES, PLEASE VISIT: http://www.derwent.com/userguides/dwpi guide.html <<< => d all abeg tech abex tot L156 ANSWER 1 OF 5 WPIX (C) 2003 THOMSON DERWENT 2002-618941 [66] WPIX ΑN DNC C2002-174706 TΙ Treating addiction disorder, e.g. nicotine addiction, comprises administering first and second alpha-3 beta-4 nicotinic receptor antagonist, where the first and second antagonists are different. DC GLICK, S D; MAISONNEUVE, I M IN PΑ (GLIC-I) GLICK S D; (MAIS-I) MAISONNEUVE I M; (ALBA-N) ALBANY MEDICAL COLLEGE CYC 100 ΡI US 2002103109 A1 20020801 (200266)\* 17p A61K031-00 WO 2002060425 A1 20020808 (200266) EN A61K031-00 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW ADT US 2002103109 A1 Provisional US 2001-264742P 20010129, US 2002-51770 20020118; WO 2002060425 A1 WO 2002-US2547 20020129 PRAI US 2001-264742P 20010129; US 2002-51770 20020118 IC ICM A61K031-00 ICS A61K031-44; A61K031-70; A61K045-06 AB US2002103109 A UPAB: 20021014 NOVELTY - Method (M1) for treating an addiction disorder comprises administering a first alpha-3 beta-4 nicotinic receptor antagonist, (I) and a second alpha-3 beta-4 nicotinic receptor antagonist (II), where (II) is different from (I). (I) and (II) are administered simultaneously of non-simultaneously.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

kwon - 10 / 051770 (1) a composition comprising (I) and (II), where (I) and (II) are different; (2) method (M2) of evaluating a compound for its effectiveness in treating addiction disorders comprising assessing the compounds ability to bind to alpha-3 beta-4 nicotinic receptors; and (3) method (M3) for treating an addiction disorder comprising administering an alpha-3 beta-4 nicotinic receptor antagonist. ACTIVITY - Antiaddictive; Antismoking; Antialcoholic. Test details are described but no suitable results are given. MECHANISM OF ACTION - Alpha-3 beta-4 nicotinic receptor antagonist. USE - For treating addiction disorders, e.g. nicotine, opioid, heroin, amphetamine, cocaine and alcohol addiction, (all claimed). Dwg.0/14 CPI AB; DCN CPI: B06-D18; B10-B04B; B14-L06; B14-M01A; B14-M01B; B14-M01C UPTX: 20021014 TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method (M1): When (I) and (II) are administered sequentially there is preferably 4 hours between each administration. Preferred Composition: (I) and (II) are present in weight ratio of 10:1 -1:10 (preferably 5:1 - 1:5). The composition is in the form of a tablet, capsule, granular dispersible powder, suspension, syrup or elixir. The composition further comprises inert diluent, granulating agent, disintegrating agent and/or lubricating agent. Preferred Method (M2): The method involves contacting the test compound with the alpha-3 beta-4 nicotinic receptor and determining the amount of test compound which binds to the receptor. Preferred Method (M3): The method specifically excludes the use of mecamylamine, 18-methoxycoronaridine, bupropion, dextromethorphan, dexrorphan or ibogaine. The alpha-3 beta-4 nicotinic receptor antagonist is specific or selective for alpha-3 beta-4 nicotinic receptors and is more potent than 18-methoxycoronaridine at the receptors. SPECIFIC COMPOUNDS - Use of 5 compounds in the composition and (M1) is specifically claimed, i.e. mecamylamine, 18methoxycoronaridine, bupropion, dextromethorphan and dextrorphan (preferably (I) is mecamylamine and (II) is dexromethorphan). ADMINISTRATION - (I) and (II) are administered in dosages of 0.01-10(preferably 0.1-5) mg/kg/day. Administration of (I) and (II) can be individually or together, orally or parenterally (e.g. intraventricular, intracerebral, intramuscular, intravenous, intraperitoneal, rectal and subcutaneous administration). L156 ANSWER 2 OF 5 WPIX (C) 2003 THOMSON DERWENT 2001-514499 [56] WPIX C2001-153730 Treating addiction to substances e.g. alcohol, nicotine and inhalant solvents comprises administering mu-opioid receptor antagonist, calcium channel blocker and NMDA-glutamate receptor modulator. B05 SCHULMAN, A; SHULMAN, A (SHUL-I) SHULMAN A; (SCHU-I) SCHULMAN A WO 2001052851 A1 20010726 (200156)\* EN 46p A61K031-485 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

> W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

FS

FΑ

MC TECH

ABEX

AN

DNC

TΙ

DC

IN

PΆ CYC PΙ

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001026574 A 20010731 (200171) A61K031-485
NO 2002003482 A 20020919 (200275) A61K000-00
EP 1250136 A1 20021023 (200277) EN A61K031-485

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

ADT WO 2001052851 A1 WO 2001-AU60 20010122; AU 2001026574 A AU 2001-26574 20010122; NO 2002003482 A WO 2001-AU60 20010122, NO 2002-3482 20020722; EP 1250136 A1 EP 2001-901062 20010122, WO 2001-AU60 20010122

FDT AU 2001026574 A Based on WO 200152851; EP 1250136 A1 Based on WO 200152851 PRAI AU 2000-2237 20001221; GB 2000-1390 20000122; GB 2000-1647 20000126; AU 2000-22370 20001221

IC ICM A61K000-00; A61K031-485

ICS A61K031-16; A61K031-277; A61K031-4418; A61K031-4422; A61K031-4965; A61K031-554; A61P025-30; A61P025-32; A61P025-34; A61P025-36

AB WO 200152851 A UPAB: 20011001

NOVELTY - Methods of treating substance addiction comprise administering a combination of:

- (a) a micro -opioid receptor antagonists ( micro ORA);
- (b) a calcium channel blocker (CCB) that is long-acting or in sustained release form or that is nimodipine in rapid-release form; and
  - (c) an N-methyl-D-aspartate (NMDA)-glutamate receptor modulator.

ACTIVITY - Antiaddictive; antialcoholic.

Six detoxified alcoholic patients were treated in an N-of-1 double-blind, placebo-controlled, crossover trial with a daily dose of naltrexone (25 mg), acamprosate (1 g) and amlodipine, felodipiine or verapamil (at the specified or half the specified therapeutic dose. Each patient received sequentially three different, but operationally related treatments, each on an oral once daily basis labeled A (active or control treatment), B (wash out) or C (control or washout treatment). A and C were given for the same and longest length of time available before the trial was terminated. Administration of active and control treatments was always separated by a daily wash out treatment given for 1 week. Scoring of key parameters was based on questionnaires completed by the subject. For the audit score, an initial baseline questionnaire preceding treatment and weekly thereafter was conducted. The participant's answers were assigned a value and the score for all 10 questions totaled (out of 40). A total of 13+ indicated alcohol dependent, 8+ hazardous drinker, less than 8 a safe drinker and 0 total abstinence. Levels of craving, tendency to relapse and degree of abstinence were rated by the participant on a scale of 0,0 (absence of craving, absence of relapse) and 10 (total abstinence from alcohol and volatile inhalant). In two participants, the administered dose of amlodipine (6 mg) gave a number of initial transient side-effects that were generally prevented by the prior administration of 20 mg propranolol, which generally had no effect on blood pressure. One 47-year-old female alcoholic who had a drinking history of 6-10 units per day for 10 years received 25 mg/day naltrexone, 3 multiply 333 mg/day acamprosate and placebo for 5 weeks, 25 mg/day naltrexone and 3 multiply 333 mg/day acamprosate for 1 week and 25 mg/day naltrexone, 3 multiply 333 mg/day acamprosate and 5 mg/day amlodipine for 5 weeks. Her baseline scores were audit = 30, craving = 9, relapse = 2 and abstinence = 0. Her weekly scores were: audit = 18, 17, 14, 14, 14, 14, 12, 11, 13, 13 and 5 for weeks 2-12, respectively; craving = 0 for all weeks; relapse = 0 for all weeks; and abstinence = 10 for all weeks. Weekly side-effects were minimal, nil, minimal, nil, nil, nil, moderate for 2 days), mild, nil and nil. Improved ancillary parameters were: energy =1+ for weeks 2-10, 1++ for week 11 and 1+++ for week 12; thinking = 1+ for weeks 2-10, 1++ for week 11 and 1+++ for week 12; and in control = 1+ for weeks 2-10, 1++ for week 11 and 1+++ for week 12. In the patient's view, her progress was progress+ for weeks 2-10, progress++ for week 11 and progress +++ for week 12.

MECHANISM OF ACTION - micro -opioid receptor antagonist; calcium channel blocker; NMDA-glutamate receptor modulator; ganglion nicotinic receptor antagonist; nicotinic cholinergic receptor antagonist or a

kappa-opioid agonist.

FS CPI

FA AB; DCN

MC CPI: B04-A03; B04-A04; B06-D18; B06-E03; B06-F03; B07-D04D; B07-D05; B09-D01; B10-A15; B10-B02E; B14-M01; B14-M01A; B14-M01C

TECH UPTX: 20011001

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method: The microORA is naltrexone (25 mg once daily (od)), nalmefine, buprenorphine or 1-alpha-acetylmethadol. The NMDA-glutamate receptor modulator is 3-((+/-)-2-carboxypiperizin-4-yl)-propyl-1-phosphonic acid (CCP), dizocilpine, HA966, ibogaine, memantine, ifenprodil, eliprodil or acamprostate (333 or 666 mg three times daily (tid) or 1000 mg od or twice daily (bd). The CCB is nifedipine (15-120 mg od), nimodipine (15-60 mg tid or four times daily (qid)), nisoldipine (20-80 mg od or 10-40 mg bd), felodipine (2.5-20 mg od), amlodipine (2.5-20 mg od), darodipine, floridipine, lacidipine (2-8 mg od), isradipine (2.5-20 mg od), niguldipine, niludipine, oxadipine, elgodipine, riodipine, nilvadipine, lemdipine, nitrendipine (5-20 mg od), nicardipine (30-120 mg od or 15-60 mg bd), verapamil (80-480 mg od), diltiazem (90-360 mg od) or flunarizine (10-20 mg od, bd or tid). The CCB is long-acting amlodipine or sustained-release verapamil, nifedipine or felodipine. (a), (b) and/or (c) are adapted for oral administration. The addictive substance is nicotine and the composition further comprises a ganglion nicotinic receptor antagonist such as mecamylamine, a nicotinic cholinergic receptor antagonist such as bupropion, gamma-vinyl gamma amino butyric acid (GABA) (vigabatrin) or a kappa-opioid agonist.

ABEX

ADMINISTRATION - Administration of the active agents is as combined or discrete doses. Administration may be oral (claimed), parenteral, transdermal or by implantation (e.g. subcutaneous implants). Dosage is dependent on the agents used but may include 25 mg od naltrexone, 333 or 666 mg tid or 1000 mg od or bd acamprostate, 15-120 mg od nifedipine, 15-60 mg tid or qid nimodipine, 20-80 mg od or 10-40 mg bd nisoldipine, 2.5-20 mg od felodipine, 2.5-20 mg od amlodipine, 2-8 mg od lacidipine, 2.5-20 mg od isradipine, 5-20 mg od nitrendipine, 30-120 mg od or 15-60 mg bd nicardipine, 80-480 mg od verapamil, 90-360 mg od diltiazem or 10-20 mg od, bd or tid flunarizine (claimed).

L156 ANSWER 3 OF 5 WPIX (C) 2003 THOMSON DERWENT

AN 2001-514493 [56] WPIX

DNC C2001-153724

TI Nicotinic antagonists in preparation of medicaments adapted for ocular administration, used in control of postnatal ocular growth and treatment and prevention of myopia.

DC B05

IN LINDSTROM, J M; STONE, R A

PA (VALL-N) VALLEY FORGE PHARM INC

CYC 95

PI WO 2001052832 A1 20010726 (200156)\* EN 53p A61K031-135

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001030969 A 20010731 (200171) A61K031-135

EP 1272170 A1 20030108 (200311) EN A61K031-135

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

ADT WO 2001052832 A1 WO 2001-US1692 20010118; AU 2001030969 A AU 2001-30969 20010118; EP 1272170 A1 EP 2001-903112 20010118, WO 2001-US1692 20010118 FDT AU 2001030969 A Based on WO 200152832; EP 1272170 A1 Based on WO 200152832 PRAI US 2000-176875P 20000118

IC ICM A61K031-135

ICS A61K031-13; A61K031-44; A61K031-445; A61P027-10

AB WO 200152832 A UPAB: 20011001

NOVELTY - Use of nicotinic antagonists for the preparation of medicaments adapted for ocular administration for the control of postnatal ocular growth.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a method of inhibiting the abnormal axial growth of the eye of a host animal comprising the step of administering to the eye during postnatal development, nicotinic antagonist to inhibit the abnormal postnatal growth of the eye, or abnormal equatorial expansion of the eye, or abnormal vitreous cavity expansion of the eye;
- (2) a method for inhibiting the development of myopia comprising ocular administration of nicotinic antagonist;
- (3) methods of detecting the ability of nicotinic antagonists to control postnatal ocular growth by containing a 1st animal eye with a therapeutically effective amount of a nicotinic antagonist, detecting the change in growth of the 1st animal eye, applying a known control agent in a 2nd animal eye, observing the results of the control agent on the change in growth of the 2nd animal eye and comparing the change in growth of the 1st eye with the change in growth of a 2nd eye; and
- (4) methods of identifying compounds that can be used to modulate myopia by incubating a cell that expresses a nicotinic receptor in the presence and absence of test compound, determining whether the test compound binds to the nicotinic receptor, selecting a test compound that binds to the nicotinic receptor, administering the selected test compound to a test animal, determining whether the test compound alters the development of myopia and selecting a compound that alters the development of myopia.

ACTIVITY - Ophthalmological.

Cohorts of control chicks wearing unilateral goggles and treated with vehicle developed ipsilateral myopia of -7 to -12 diopters compared with the contralateral non-goggled eyes. The axial lengths in the goggled eyes were increased by 0.4-0.6 mm compared to the contralateral eyes. The axial length difference between goggled and open eyes was greater as measured by ultrasound. The vitreous cavity of goggled eyes was enlarged in both the axial and equatorial dimensions, with vitreous cavity elongation largely accounting for the increase in overall axial length of the eye. Goggle wearing alone induced no significant effect on anterior chamber depth in most cohorts. Chlorisondamine was given every other day to goggled chicks. Chlorisondamine reduced the myopic refractive index (P less than 0.001), inhibited the excessive axial elongation developing beneath the goggle (P less than 0.001 by ultrasound, P=0.008 by calipers) and reduced the vitreous cavity expansion in both axial (P less than 0.001) and equatorial (P=0.001) dimension. Chlorisondamine had no statistically significant effect on anterior chamber depth.

MECHANISM OF ACTION - Nicotinic antagonist.

USE - Nicotinic antagonists are used to prepare medicaments used to control postnatal ocular growth, to inhibit abnormal axial growth, abnormal equatorial expansion and abnormal vitreous cavity expansion of the eyes of host animals during postnatal development and to prevent or treat myopia (claimed).

ADVANTAGE - The nicotinic antagonists are well tolerated following local application in the human eye, without inducing pupil dilation and paralysis of accommodation in children.

Dwg.0/3

FS CPI

FA AB; DCN

MC CPI: B04-A07A; B06-A02; B06-D03; B06-D04; B06-D15; B06-D18; B07-D05;

B10-B03B; B10-B04B; B14-L06; B14-N03 TECH UPTX: 20011001 TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Components: The nicotinic antagonist is a competitive nicotinic antagonist, preferably methyllcaconitine or dihydro-beta-erythroidine, a channel-blocking nicotinic antagonist, preferably mecamylamine or chlorisondamine, a noncompetitive nicotinic antagonist, preferably sertraline, paroxetine, nefaxodone, venlafaxine, fluoxetine, bupropion, phencyclidine or ibogaine, an antibody inhibiting nicotine receptor function or an agonist that acts like a nicotinic antagonist. ABEX ADMINISTRATION - Administration is ocular (claimed) in the form of eye drops as well as parenteral, enteral or topical. Administration is to mammals including humans as well as birds, monotremes, reptiles and fish. Eye drops contain 0.005-10 (0.01-5; 0.1-2)%. Dosage regimen is 1-4times/day spaced evenly throughout the waking hours. L156 ANSWER 4 OF 5 WPIX (C) 2003 THOMSON DERWENT 2001-079494 [09] WPIX AN DNC C2001-022743 ΤI Compositions comprising antagonists in combination with nicotinic acid, opioid agonists, anti-depressants, stimulants, NSAIDS and local anaesthetics are useful in treating excitable system disorders, pain and psychiatric disorders. DC B02 B05 HAMANN, S R ΙN (KENT) UNIV KENTUCKY RES FOUND PACYC 1 A 20001128 (200109)\* PΤ US 6153621 26p A61K031-44 ADT US 6153621 A Provisional US 1997-50557P 19970623, US 1998-102089 19980623 PRAI US 1997-50557P 19970623; US 1998-102089 19980623 IC ICM A61K031-44 ICS A61K031-13 6153621 A UPAB: 20010213 AΒ IIS NOVELTY - Combined antagonist compositions in combination with nicotinic acid, opioid agonists, anti-depressants, stimulants, NSAIDS and local anaesthetics are useful in treating excitable system disorders, pain and psychiatric disorders. DETAILED DESCRIPTION - A composition for the treatment of excitable system abnormalities, pain and psychiatric disorders comprises synergistic amounts of mecamylamine and naltrexone in a carrier. ACTIVITY - Analgesic; antidrug. MECHANISM OF ACTION - None given. USE - The composition is administered to provide increased or decreased excitable system activity in the patient and is useful for treating pain, drug abuse and underlying psychopathologies. ADVANTAGE - The treatments are devoid of abuse potential. Dwg.0/34 FS CPI FA AB; DCN CPI: B04-A03; B04-A04; B06-A03; B06-D01; B06-D04; B06-D08; B06-D12; MC B06-D16; B06-D18; B06-F02; B06-F05; B07-B01; B07-D02; B07-D04C; B07-D05; B07-E01; B08-C01; B08-D01; B10-A10; B10-B03B; B10-B04B; B10-C04C; B10-C04D; B10-D03; B14-C01; B14-J01; B14-M01; B14-M01C TECH UPTX: 20010213 TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Composition: The mecmylamine and naltrexone are present in a dosage of up to 0.25 mg/kg each. The composition comprises opioid antagonist(s) and nicotinic

ADMINISTRATION - Orally, nasally, rectally, intravenously, epidurally or intrathecally.

antagonist(s) (especially naltrexone and mecamylamine

ABEX

EXAMPLE - The opioid antagonist, naltrexone and nicotinic antagonist, mecamylamine were administered in dosage up to 0.25 mg/kg each. When treated with the combination the patient exhibited stabilized system activity with less excitory influence.

```
L156 ANSWER 5 OF 5 WPIX (C) 2003 THOMSON DERWENT
    1999-277208 [23]
ΑN
                       WPIX
DNC
    C1999-081401
TΙ
    Composition and methods for treating tobacco, nicotine, cocaine and
     alcohol addiction.
DC
     B05
ΤN
    CARY, D D
PΑ
     (CARY-N) CARY MEDICAL CORP
CYC
    27
PΙ
    WO 9917803
                  A1 19990415 (199923) * EN
                                             30p
                                                     A61K045-06
       -RW:-AT-BE-CH-CY DE DK ES FI-FR GB GR IE IT LU MC NL PT SE
        W: AU BR CA CN JP KR SG US
                  A 19990427 (199936)
    AU 9896011
    EP 1019088
                  A1 20000719 (200036) EN
                                                     A61K045-06
        R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
                  A 20000801 (200043)
    BR 9812615
                                                     A61K045-06
                  B1 20010306 (200115)
    US 6197827
                                                     A61K031-00
    CN 1280505
                  A 20010117 (200128)
                                                     A61K045-06
    US 2001014678 A1 20010816 (200149)
                                                     A61K031-553
    KR 2001030860 A 20010416 (200163)
                                                     A61K045-06
    JP 2001518520 W
                      20011016 (200176)
                                              33p
                                                     A61K045-06
    AU 750808
                  B 20020725 (200260)
                                                     A61K045-06
    EP 1019088
                  B1 20030212 (200313)
                                        EN
                                                     A61K031-135
         R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
ADT WO 9917803 A1 WO 1998-US20894 19981002; AU 9896011 A AU 1998-96011
    19981002; EP 1019088 A1 EP 1998-949758 19981002, WO 1998-US20894 19981002;
    BR 9812615 A BR 1998-12615 19981002, WO 1998-US20894 19981002; US 6197827
    B1 Provisional US 1997-60794P 19971003, WO 1998-US20894 19981002, US
    1999-423897 19991116; CN 1280505 A CN 1998-811814 19981002; US 2001014678
    Al Provisional US 1997-60794P 19971003, Div ex WO 1998-US20894 19981002,
    Div ex US 1999-423897 19991116, US 2001-785496 20010220; KR 2001030860 A
     KR 2000-703540 20000331; JP 2001518520 W WO 1998-US20894 19981002, JP
     2000-514672 19981002; AU 750808 B AU 1998-96011 19981002; EP 1019088 B1 EP
     1998-949758 19981002, WO 1998-US20894 19981002
FDT AU 9896011 A Based on WO 9917803; EP 1019088 A1 Based on WO 9917803; BR
     9812615 A Based on WO 9917803; US 6197827 B1 Based on WO 9917803; US
     2001014678 Al Div ex US 6197827; JP 2001518520 W Based on WO 9917803; AU
     750808 B Previous Publ. AU 9896011, Based on WO 9917803; EP 1019088 B1
    Based on WO 9917803
PRAI US 1997-60794P
                      19971003; US 1999-423897
                                                 19991116; US 2001-785496
     20010220
     ICM
         A61K031-00; A61K031-135; A61K031-553; A61K045-06
IC
         A61K031-164; A61K031-505; A61K031-55; A61K031-554; A61P025-32;
     ICS
         A61P025-34; A61P025-36
AΒ
          9917803 A UPAB: 20011203
     NOVELTY - A composition for treating tobacco addiction or nicotine
     addiction, palliating nicotine withdrawal symptoms and facilitating
     smoking cessation comprises a nicotine receptor antagonist and an
     anti-depressant or anti-anxiety drug.
          DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:
          (i) a method of treating tobacco or nicotine addiction, palliating
     nicotine withdrawal and facilitating smoking cessation;
          (ii) a composition for treating cocaine addiction and withdrawal
     effects;
```

(iii) a method of treating cocaine addiction and withdrawal effects;(iv) a composition for treating alcohol dependence and withdrawal

effects;

```
(v) a method for treating alcohol dependence and withdrawal effects.
          ACTIVITY - Nicotine antagonist.
          MECHANISM OF ACTION - None given.
          USE - The composition and method are useful for treating tobacco,
     nicotine, cocaine and alcohol addiction, palliating nicotine, cocaine or
     alcohol withdrawal and facilitating smoking cessation.
     Dwg.0/0
FS
     CPI
FΑ
     AB; DCN
     CPI: B05-C07; B06-A02; B06-A03; B06-D03; B06-D08; B06-D12; B06-D18;
MC
          B06-E05; B06-F05; B07-D05; B07-D11; B07-D12; B08-C01; B08-D01;
          B09-D01; B10-A09B; B10-A12C; B10-A18; B10-A19; B10-A21; B10-B02G;
          B10-B03B; B10-B04B; B14-M01A; B14-M01B; B14-M01C
TECH
                    UPTX: 19990616
     TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Composition: The
     composition contains 50-300 (especially 50-150) mg of bupropion,
     1-25 (especially 1-10) mg of mecamylamine or 5-60 (especially
     5-10) mg of buspirone.
     Preferred Drugs: The anti-depressant is bupropion, doxepin,
     desipramine, clomipramine, imipramine, nortriptyline, amitriptyline,
     protriptyline, trimipramine, fluoxetine, fluvoxamine, paroxetine,
     sertraline, phenelzine, tranylcypromine, amoxapine, maprotiline,
     trazodone, venlafaxine or mirtazapine. The nicotine receptor antagonist is
     mecamylamine, amantadine, pempidine, dihydro-beta-erythroidine,
     hexamethonium, erysodine, chlorisondamine, trimethaphan camsylate,
     tubocurarine chloride or d-tubocurarine. The anti-anxiety agent is
     hydroxyzine, meprobamate or buspirone.
ABEX
     EXAMPLE - A typical composition contained mecamylamine (1.0mg)
     and bupropion (50mg) and was administered 1-6 times daily.
=> d his
     (FILE 'HOME' ENTERED AT 15:45:16 ON 10 MAR 2003)
                SET COST OFF
     FILE 'REGISTRY' ENTERED AT 15:45:26 ON 10 MAR 2003
              4 S (ETHANOL OR COCAINE OR NICOTINE OR HEROIN)/CN
L1
L2
            251 S (COCAINE OR NICOTINE OR HEROIN) AND (C17H21NO4 OR C21H23NO5 O
             72 S L2 AND 1/NC
T.3
T.4
             36 S L3 NOT (LABELED OR ION OR (D OR T)/ELS OR 11C# OR 13C# OR 14C
L5
             33 S L4 NOT BUTEN
                E MECAMYLAMINE/CN
              1 S E3
L6
                E 18-METHOXYCORONARIDINE/CN
              1 S E3
T.7
             12 S C22H28N2O3/MF AND IBOGAMIN?
L8
L9
              3 S L8 AND 18 AND 21
                E BUPROPION/CN
              1 S E3
L10
              7 S C13H18CLNO/MF AND 46.150.18/RID AND 1 PROPANONE AND 3 CHLOROP
L11
L12
              6 S L11 NOT (DIETHYLAMIN OR D/ELS)
              5 S L12 NOT DIETHYLAMINO
L13
                E DEXTR4OMETHORPHAN/CN
                E DEXTROMETHORPHAN/CN
              1 S E3
L14
L15
              7 S C18H25NO/MF AND MORPHINAN AND 3 METHOXY 17 METHYL
              4 S L15 NOT (T/ELS OR LABELED OR ION)
L16
                E DEXTRORPHAN/CN
L17
              1 S E3
T.18
              7 S C17H23NO/MF AND MORPHINAN 3 OL AND 17 METHYL
```

5 S L18 NOT (LABELED OR D/ELS)

L19

```
E IBOGAINE/CN
L20
              1 S E3
L21
              8 S C20H26N2O/MF AND IBOGAMINE AND 12 METHOXY
L22
              3 S L21 NOT (D OR T)/ELS
L23
              2 S L22 NOT 50838-05-6
L24
             20 S L6, L7, L9, L10, L13, L14, L16, L17, L19, L20, L23
                SEL RN
            136 S E1-E20/CRN
L25
             66 S L25 NOT (MXS/CI OR COMPD OR WITH)
L26
L27
             64 S L26 NOT CONJUGATE
L28
             70 S L25 NOT L26
     FILE 'HCAPLUS' ENTERED AT 16:03:09 ON 10 MAR 2003
           3562 S L24
L29
            929 S L27
L30
           5187 S MECAMYLAMINE OR 18 METHOXYCORONARIDINE OR BUPROPION OR DEXTRO
L31
            817 S LEVORPHANOL
L32
L33
           6425 S L29-L32
                E NICOTINIC RECEPTOR/CT
                E E6+ALL
             76 S E77, E78, E76 (L) (ALPHA3BETA4 OR (ALPHA3 OR ALPHA 3) (L) (BETA4
L34
                E NICOTINIC ANTAGONIST/CT
                E E4+ALL
              4 S E7, E8, E6 (L) (ALPHA3BETA4 OR (ALPHA3 OR ALPHA 3) (L) (BETA4 OR
L35
L36
             19 S L33 AND L34, L35
L37
             76 S L34, L35, L36
                E NICOTINIC RECEPTOR/CT
                E E6+ALL
L38
           7380 S E77, E78, E76
                E E89+ALL
L39
            415 S E7, E8, E6
           7577 S L38, L39
L40
            276 S L40 AND (ALPHA3BETA4 OR (ALPHA3 OR ALPHA 3) (L) (BETA4 OR BETA
L41
L42
              2 S L40 AND (A3(L)B4)
             43 S L33 AND L41, L42
L43
            100 S L37, L43
L44
L45
            277 S L41-L44
L46
             43 S L33 AND L45
     FILE 'REGISTRY' ENTERED AT 16:09:55 ON 10 MAR 2003
L47
              1 S 467-77-6
L48
              2 S 467-77-6/CRN
     FILE 'HCAPLUS' ENTERED AT 16:10:10 ON 10 MAR 2003
L49
            190 S L47, L48
L50
             43 S L33, L49 AND L45
                E DRUG DEPENDENCE/CT
L51
          11335 S E3+NT OR E4
                E E3+ALL
                E E10+ALL
           3691 S E3,E4
L52
L53
          39645 S E3+NT
L54
              4 S L50 AND L51, L52, L53
     FILE 'REGISTRY' ENTERED AT 16:16:00 ON 10 MAR 2003
L55
              2 S (MORPHINE OR METHAMPHETAMINE)/CN
L56
             15 S C17H19NO3/MF AND MORPHINAN 3 6 DIOL AND 7 8 DIDEHYDRO AND 4 5
L57
              8 S L56 NOT (LABELED OR 11C# OR (D OR T)/ELS)
              7 S L57 NOT 14C#
L58
L59
              8 S C10H15N/MF AND 46.150.18/RID AND BENZENEETHANAMINE AND ALPHA
L60
              4 S L59 AND N
L61
              3 S L60 NOT D/ELS
L62
             10 S L55, L58, L61
```

```
SEL RN
L63
           238 S E1-E10/CRN
            59 S L63 NOT ((MXS OR IDS)/CI OR COMPD OR WITH OR CONJUGATE)
L64
L65
            58 S L64 NOT B/ELS
L66
            272 S L1, L5, L63, L65
               SEL RN L6
L67
             10 S E11/CRN
             4 S L67 AND MXS/CI
L68
               SEL RN 1 2
L69
             2 S E12-E13
             39 S L28 AND MXS/CI
L70
     FILE 'HCAPLUS' ENTERED AT 16:24:32 ON 10 MAR 2003
L71
             1 S L69
L72
             3 S L54 NOT ACETYLCHOLINE/TI
           6558 S L33, L47, L48
L73
L74
         188417 S L1, L5, L62
L75
         916746 S ALCOHOL OR ETHANOL OR ETHYL ALCOHOL OR NICOTINE OR OPIOID OR
L76
        85289 S TOBACCO OR SMOKINE OR SMOKE OR SNUFF OR CIGAR?
L77
         3304 S L73 AND L74-L76
L78
          1084 S L77 AND L51-L53
L79
          59019 S L74-L76 AND (ADDICT? OR ABUS? OR WITHDRAW? OR ALCOHOLISM OR (
L80
           755 S L73 AND L79
L81
          1417 S L78, L80
L82
          520 S L81 AND (MIX? OR ADMIX? OR COMBIN? OR SYNERG? OR COMPOSITION
L83
            45 S L82 AND L40
            2 S L82 AND L37,L41-L45
L84
L85
            3 S L72, L84
L86
           43 S L83 NOT L85
L87
          6558 S L33, L49
L88
          3314 S L87 AND (L74 OR L75 OR L76 OR SMOKING)
L89
          2253 S L87 AND (MIX? OR ADMIX? OR COMBIN? OR SYNERG? OR COMPOSITION
L90
          4446 S L88, L89
L91
            45 S L90 AND (ALPHA3BETA4 OR (ALPHA3 OR ALPHA 3 OR A3)(L)(BETA4 OR
L92
           607 S L90 AND L40
L93
            37 S L91 AND L92
L94
              0 S L93 NOT L83-L86, L46, L50
               SEL DN AN L83 8
               SEL DN AN L83 9
L95
             1 S E17-E19 AND L83
L96
              4 S L85, L95 AND L29-L46, L49-L54, L71-L95
L97
              4 S L96 AND L1, L5, L24, L27, L47, L48, L62, L65, L66, L69
     FILE 'REGISTRY' ENTERED AT 16:42:48 ON 10 MAR 2003
L98
           1 S 300-62-9
L99
           100 S 300-62-9/CRN
L100
           85 S L99 NOT MXS/CI
            18 S L100 NOT (COMPD OR WITH OR CONJUGATE)
L101
L102
            17 S L101 NOT CR/ELS
     FILE 'HCAPLUS' ENTERED AT 16:43:46 ON 10 MAR 2003
       1 S L98,L102 AND L97
L103
L104
             1 S L97 AND AMPHETAMINE
L105
             4 S L97, L103, L104
     FILE 'HCAPLUS' ENTERED AT 16:44:19 ON 10 MAR 2003
               SEL HIT RN
     FILE 'REGISTRY' ENTERED AT 16:44:43 ON 10 MAR 2003
L106 21 S E20-E40
```

FILE 'REGISTRY' ENTERED AT 16:44:50 ON 10 MAR 2003

```
FILE 'MEDLINE' ENTERED AT 16:45:08 ON 10 MAR 2003
                E NICOTINIC RECEPTOR/CT
                E E4+ALL
                E E2+ALL
L107
           6418 S E8+NT
L108
           314 S NICOTINIC RECEPTOR ANTAGONIST
L109
           3352 S NICOTINIC RECEPTOR
L110
            705 S ALPHA3BETA4 OR (ALPHA3 OR ALPHA 3 OR A3) (L) (BETA4 OR BETA 4 O
L111
            266 S L107-L109 AND L110
                E SUBSTANCE ABUSE/CT
                E E3+ALL
                E E2+ALL
         131335 S E5+NT
L112
                E E75+ALL
L113
          63818 S E6+NT
                E E36+ALL
L114
           1695 S E27+NT
                E STREET DRUGS/CT
                E E3+ALL
           4241 S E4+NT
L115
              1 S L111 AND L112-L115
L116
L117
           3430 S L24 OR L47
L118
           5110 S L31 OR L32
L119
            379 S L112-L115 AND L117, L118
                E DRUG COMBINATION/CT
L120
          34971 S E6+NT
                E DRUG THERAPY, COMBINED/CT
                E DRUG THERAPY, COMBINATION/CT
          72418 S E3+NT
L121
             26 S L119 AND L120, L121
L122
              6 S L122 NOT AB/FA
L123
L124
             20 S L122 NOT L123
                E NICOTINIC ANTAGONIST/CT
          17037 S E4+NT
L125
            102 S L125 AND L112-L115
L126
                E TOBACCO/CT
                E E3+ALL
L127
             14 S L125 AND E6+NT
L128
             55 S L125 AND E11+NT
L129
             17 S L125 AND E12+NT
L130
              9 S L126-L129 AND L120, L121
              9 S L130 AND L107-L130
L131
L132
           1910 S MECAMYLAMINE
L133
             11 S L132 AND (DEXTROMETHORPHAN OR DEXTROPPHAN OR BUPROPION OR IBO
                SEL DN AN 3 6
L134
              2 S L133 AND E1-E6
L135
              2 S L134 AND L107-L134
     FILE 'MEDLINE' ENTERED AT 17:01:04 ON 10 MAR 2003
     FILE 'WPIX' ENTERED AT 17:01:10 ON 10 MAR 2003
L136
             27 S L132/BIX
                E MECAMYLAMINE/DCN
                E E3+ALL
             27 S E2
L137
L138
             3 S E4
L139
             33 S L136-L138
L140
            403 S (DEXTROMETHORPHAN OR DEXTRORPHAN OR BUPROPION OR IBOGAINE OR
                E DEXTROMETHORPHAN/DCN
                E E3+ALL
L141
            222 S E2
L142
            106 S E4
L143
```

1 S E6

L144	1	S	E8
L145	113	Ś	E10
L146	1	S	E12
		Ė	DEXTRORPHAN/DCN
		E	E3+ALL
L147	35	S	E2
L148	17	S	E4
L149	1	S	E6
		E	BUPROPION/DCN
		Ε	E3+ALL
L150	58	S	E2
L151	23	S	E 4
		E	IBOGAINE/DCN
		E	E3+ALL
L152	12	S	E2
L153	2	S	E4
L154	3	S	E6
		Ε	18-METHOXYCORONARIDINE/DCN
		Ε	METHOXYCORONARIDINE/DCN
		Ε	18 METHOXYCORONARIDINE/DCN
L1.55	7	S	L139 AND L140-L154
L156	5	S	L155 NOT (POLYMER OR SKIN)/TI

FILE 'WPIX' ENTERED AT 17:07:42 ON 10 MAR 2003